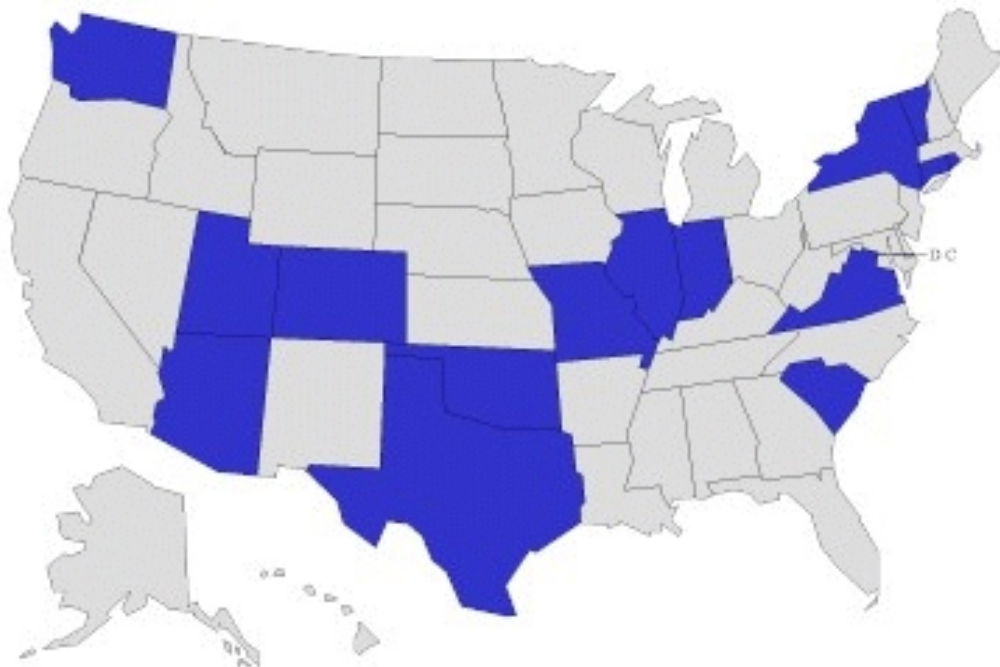


SIXTEEN STATE STUDY ON MENTAL HEALTH PERFORMANCE MEASURES



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Mental Health Services
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PREFACE

In recent years, a strong interest has been expressed in the mental health field regarding the capability to identify and adequately measure the effectiveness of mental health service provision. Efforts supporting this interest within the Center for Mental Health Services (CMHS), part of the Substance Abuse and Mental Health Services Administration (SAMHSA), within the U.S. Department of Health and Human Services, have included the development of data standard and report card grant programs for State Mental Health Authorities. The Mental Health Statistics Improvement Program (MHSIP) Consumer-Oriented Report Card, introduced in 1996 by a CMHS-sponsored initiative to develop comparable data standards for the mental health field, provided a framework of performance indicators within the domains of access, appropriateness, outcome, and prevention, to be applied in mental health service programs. A subsequent grant effort was the funding of 45 State Reform Grants in which performance indicators were implemented, using the framework of the MHSIP Report Card. Subsequent related efforts included a one-year Five State Feasibility Project, where five States piloted 32 selected mental health performance indicators to assess the capability of implementing these measures on a comparable basis. The measures were adopted from the National Association of State Mental Health Program Directors (NASMHPD) Framework of Performance Indicators which reflected much of the Report Card. This was followed by a larger effort, the State Indicator Pilot Grant Project, in which 16 State Mental Health Authorities were funded to pilot these 32 performance indicators over a three-year period.

From 1998 to 2001, the 16 State Indicator Pilot Grantees worked to assess, refine, and pilot indicators that tested access, appropriateness, outcome, and program management performance on a statewide basis. The resulting study has produced statewide performance indicator data for populations served in public mental health systems for such areas as consumer perception of services, client level of employment, proportion of clients receiving advanced atypical medications, and extent of service utilization. The measures address both children and adults, and were collected by age, gender, and race/ethnicity. In addition, special instruments were developed and specific data collection methodologies were tested. The study provides information on the data collected by the State, and includes analyses of the issues, challenges, and recommendations from this data collection pilot.

Following the 16-State Indicator Pilot Grant Project, SAMHSA continues to support performance indicator efforts through the guiding principles of Accountability, Capacity, and Effectiveness (ACE) for mental health programs. Simultaneously, the more recent Federal Performance Partnership Grant (PPG) effort has supported a uniform reporting framework in which States will report on selected measures for the State Mental Health Block Grant Implementation Plan. The 16-State Indicator Pilot effort serves as a knowledge base in performance indicator implementation which will guide subsequent emerging national efforts.

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Section I: Overview of Study and Key Findings

INTRODUCTION

The 16-State Study on Mental Health Performance Measures represents a landmark joint State-Federal initiative to apply the same standardized definitions and obtain comparable performance and outcome indicators on public mental health systems from multiple states. This study presents results on thirty-two (32) mental health performance indicators. Several indicators use more than one measure, so a total of forty-nine (49) different measures were included in this project (for example, the indicator on “seclusion” has two different measures: the percent of consumers secluded and hours of seclusion).

Data analysts, researchers, managers, planners, and consumers from 16 state mental health agencies participated in the project with the Substance Abuse and Mental Health Services Administration (SAMHSA) and its Center for Mental Health Services (CMHS) over the three-year period from 1998 to 2001. The 16 states were selected through a competitive grant application process. The states committed to work cooperatively with each other and SAMHSA to define, implement, and report on common mental health performance indicators based on the work of the federally funded Mental Health Statistical Improvement Program (MHSIP), the National Association of State Mental Health Program Directors (NASMHPD) Framework of Mental Health Performance Indicators, and the original SAMHSA-funded Five-State Feasibility Study. Collectively, the 16 states have reported on community mental health services to almost 1.45 million individuals through public mental health systems that expended over \$7.3 billion annually to provide these services.

Despite major differences in the organizational structure of the states, their mental health service system configurations, and in their information systems, this project has compiled

data on many important performance indicators that represent the critical domains and measures identified in mental health development efforts by various national organizations. The project has demonstrated that the states can collaborate effectively to define and implement measures with appropriate Federal assistance and leadership.

The performance measures selected for this study encompassed critical concerns identified in various performance measurement initiatives and for which at least some states could report data during the study period using standardized definitions. The selected measures include, outcomes, appropriateness/quality and access measures (including clinical measures and measures from the consumer’s perspective), and measures that apply to both inpatient and community settings. States reported each indicator for the state as a whole and for age, gender, racial/ethnic, and diagnostic groups.

The 16-State Study has made substantial progress in operationalizing and compiling information on the indicators first tested by the Five-State Feasibility Study (SAMHSA, 1998) and the NASMHPD Framework of Performance Indicators (NASMHPD President’s Task Force, 1998). In addition, many of the indicators in the NASMHPD Framework had their initial feasibility of multi-state compilation and comparability tested through this study.

This project built on the prior work that the states and SAMHSA completed on developing performance measures for public mental health systems. These earlier initiatives paved the way for the 16-State Study and enabled it to accomplish its goals.

SAMHSA’s CMHS has sponsored major efforts to help the mental health community define and implement performance and outcome measures. Through its support of the Mental Health Statistics Improvement Program

(MHSIP) Consumer-Oriented Mental Health Report Card, published in 1996, CMHS helped develop a set of performance measures for systems to implement. The SAMHSA-funded MHSIP State Reform Grants enabled over 40 states to implement components of the MHSIP Consumer-Oriented Report Card, and provided needed resources and the impetus for states to implement these measures. The Five-State Feasibility Study tested the feasibility of a set of performance indicators with definitions and guidelines for state reporting that then became the basis for the 16-State Study.

Each of the 16 states in this study received a SAMHSA grant of \$100,000 per year to facilitate their participation in this project. Each of the states also devoted considerable state resources to this project. State resources included staff time, programming and computer resources, and funds to support consumer focus groups and other stakeholder participation.

The results of this study demonstrate the potential for developing standardized measures across states and confirmed that the realization of this potential will depend on enhancements of the data and performance measurement infrastructure. The results demonstrate that states are implementing mental health performance measurement systems and that some states can currently use these systems to report comparable information. The results also demonstrate that each state system has some performance measures that are unique. Considerable effort is required to assure the comparability of these measures across states and to support states as they produce improved measures of outcomes and consumer assessments of care.

BACKGROUND

The 16-State Study was funded by the Center for Mental Health Services (CMHS), part of the Substance Abuse and Mental Health Services Administration (SAMHSA), within the U.S. Department of Health and Human Services (DHHS) as a collaborative project. Sixteen states were awarded grants for a 3-year period (1999-2001) to implement performance indicators that were developed in the SAMHSA-funded Five-State Feasibility Study and the 1998 National Association of State Mental Health Program Directors' Framework of Mental Health Performance Indicators.

The primary goal of the project was to pilot and implement these indicators to: (1) compile specific performance indicators that could be reported comparably across states for national reporting, and (2) facilitate planning, policy formulation, and decision making at the state level. The grants also supported the involvement and participation of key stakeholders, including consumers and family members, at all stages of the grant process. The 16-State Study grantees were: Arizona, Colorado, Connecticut, Illinois, Indiana, Missouri, New York, Oklahoma, Rhode Island, South Carolina, Texas, Utah, Vermont, Virginia, Washington, and the District of Columbia.

Prior to its completion, the 16-State Study had a major impact on national performance indicator efforts in public mental health. Six of the 32 performance indicators in the 16-State Study are tied to the Federal Government Performance and Results Reporting Act (GPRA) as core measures for state reporting. Many of the indicators implemented by the 16-State Study have become the basis for the new SAMHSA State Mental Health Data Infrastructure Grants (DIGs) awarded in 2001 and 2002 to 49 states, the District of Columbia, and 7 US territories.

Under these DIGs, states will report standardized data tables included in the new Uniform Reporting System (URS), a critical

component of Community Mental Health Services Block Grant reporting. Under the URS, the accomplishments of individual states can be aggregated meaningfully at the national level.

Besides developing standardized definitions, the 16-State Study also provided an opportunity to develop measures related to recovery, consumer/family involvement in policy development, quality assurance, planning, expenditures for mental health, and evidence-based practices.

Background on Public Sector Performance Measurement Initiatives

The recent resurgence of mental health performance measurement has come about in response to consumer and family need, national and local funding demands for program quality and accountability, and emerging managed care initiatives.

The increased consumer and family involvement in public mental health has led to an increased need to demonstrate that services are effective and have good outcomes. Payers of mental health services, such as legislatures, executive branches of government, and other funders have demanded that public programs show results and outcomes from services. Managed care, as a mechanism to purchase mental health services, with its emphasis on cost management and possibilities of consumer choice, created new imperatives for public sector mental health managers. With the advent of managed care, managers needed to specify in measurable terms what was being purchased in contracts. In response to managed care's emphasis on cost, concern grew that savings were being accrued at the cost of quality. To counter managed care's focus on process measures, there emerged a new wave of activity to assess and monitor outcomes. In the last decade, regardless of whether or not a public sector entity was directly involved with managed care, a new, more business-like ethos began to permeate the public mental health sector. It included

more sophisticated contractual arrangements, improved data and information systems, and an emphasis on performance and outcomes measurement.

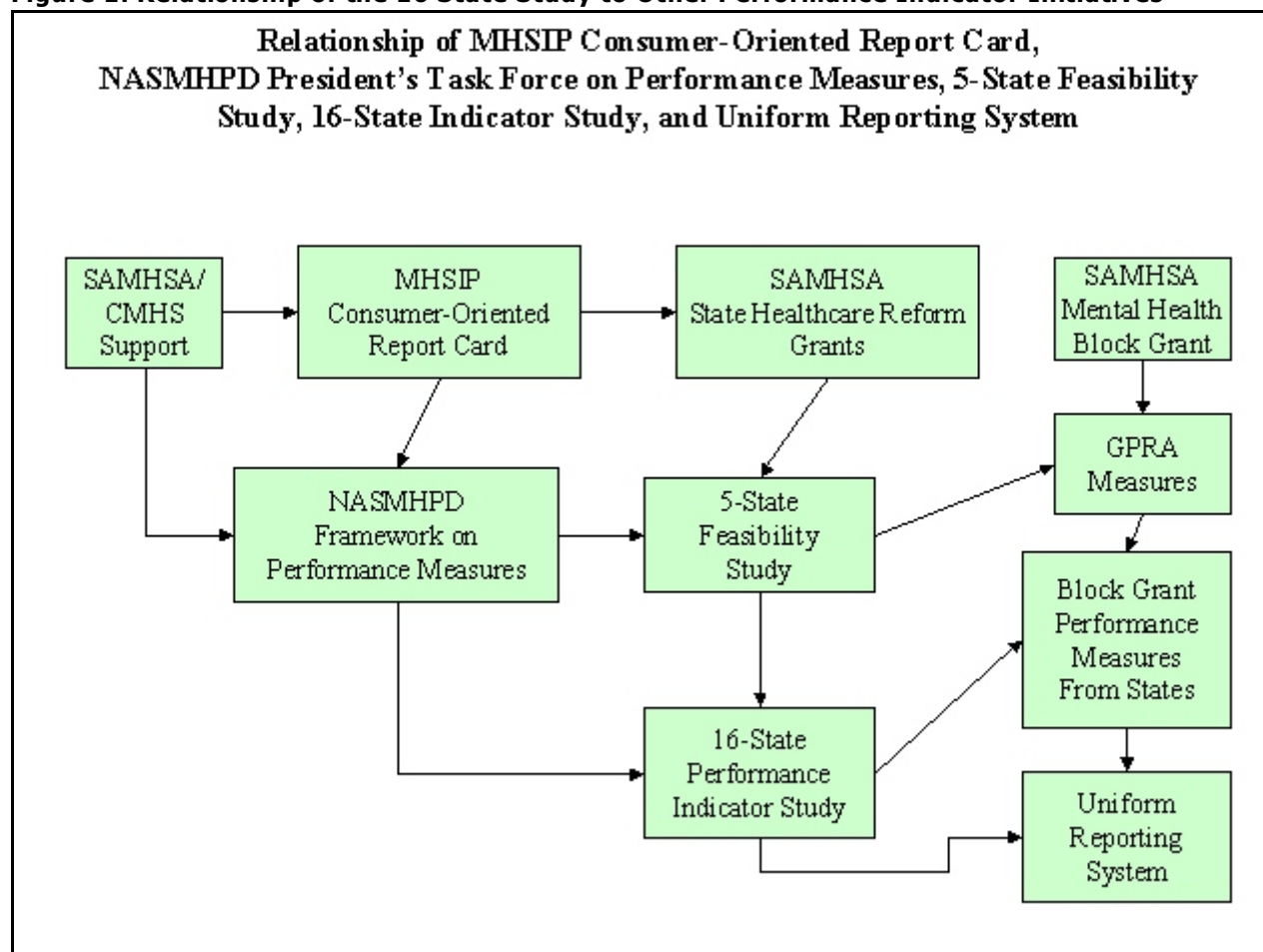
Figure 1 indicates the inter-relationships among the 16-State Study, a number of earlier mental health performance indicator initiatives, and future initiatives. Each of the initiatives is discussed below.

Mental Health Statistics Improvement Program (MHSIP):

Since its inception in 1976, the MHSIP Advisory Group (and the new MHSIP Policy Group) have worked to develop data standards for public mental health systems. The MHSIP Policy Group, which includes representatives of federal, state, and local mental health agencies and consumers and family members, has advised on data analysis and reporting issues and the development of grant programs in these areas. Over the years, the MHSIP program has developed concept papers and provided guidance to state and local mental health systems in areas such as data standards, unique identifiers, consumer-centered information systems, performance measures, and report cards. Two specific MHSIP products resulted in major SAMHSA grant initiatives to states.

The MHSIP document Data Standards for Mental Health Decision Support Systems (Leginski et.al, 1989) defined core elements required for a mental health management information system in five areas – client, encounter, financial, human resources, and organizational. The MHSIP Consumer-Oriented Mental Health Report Card (Ganju, et.al, 1996) identified performance measures that reflected consumer concerns in the domains of access, quality/appropriateness, outcomes, and prevention to be used for assessing the effectiveness of mental health services. The MHSIP proposed a Consumer Survey as part of the report card to include a consumer assessment of indicators in each of these domains.

Figure 1: Relationship of the 16 State Study to Other Performance Indicator Initiatives



The development of MHSIP minimum data standards resulted in two cycles of SAMHSA grants to states to incorporate and implement the standards in management information systems. Through these MHSIP grants, every state received at least one grant to facilitate their implementation of common data definitions and standards. This common set of data standards has resulted in the use of standardized data elements across the country. States have exhibited a range of infrastructural capacities in these areas. Not all states were able to implement the core MHSIP elements; nevertheless, the standards have helped the public sector move in the direction of a common, standardized data set.

The 1996, MHSIP Consumer-Oriented Mental Health Report Card was developed by a MHSIP task force including consumers, family members, researchers, advocates, and federal,

state, and local mental health agency representatives. SAMHSA promoted the adoption and use of the performance measures specified in the report card through the MHSIP Reform Grant program. These MHSIP reform grants assisted 45 states to implement different components of the MHSIP Report Card. These grant-funded state activities have served as a key foundation for the subsequent work of states to produce comparable mental health performance indicators.

The Five-State Feasibility Study:

In 1997, SAMHSA funded five state mental health agencies (Colorado, Illinois, Massachusetts, South Carolina, and Texas) to identify and pilot performance indicators that would be feasible and meaningful to collect and could be compiled from existing data systems within the states in a comparable

fashion. The Five-State Feasibility Study was an effort to assess the feasibility of states reporting data on standardized indicators and measures. Twenty-eight indicators were tested in the study.

NASMHPD President's Task Force on Performance and Outcomes Measures:

The NASMHPD President's Task Force was established to build on the work of the MHSIP report card so that it would have more of a management orientation and include measures that were responsive to the needs of state mental health commissioners. New performance measures were proposed in the domain of structure/management and in the performance of state hospital systems. The NASMHPD performance measures also were intended to reflect public sector values and priorities, especially as other mental health sectors proposed alternative report cards.

Using the MHSIP Report Card as a starting point, indicators from several national mental health performance measurement initiatives were reviewed, including those developed by the National Committee on Quality Assurance (NCQA), the SAMHSA Performance Partnership Grants (PPGs), the American Managed Behavioral Healthcare Association, the National Alliance for the Mentally Ill, and the American College on Mental Health Administration. Based on this review, and a survey of states designed to better understand priorities and issues of utility and burden, the task force proposed a standardized framework consisting of five domains (access, quality/appropriateness, outcomes, structure/plan management, and early intervention/prevention), providing states considerable flexibility in how these indicators were measured and reported.

This standardized framework represents the consensual position of all state mental health commissioners/directors regarding the performance measures to be used in any comprehensive mental health service delivery system. It incorporated the results of the

aforementioned Five-State Feasibility Study and NRI Behavioral Health Performance Measurement System, used to report psychiatric hospital performance measures to the Joint Commission on Accreditation of Healthcare Organization's (JCAHO) ORYX system.

GPRA Measures:

The Government Performance and Results Act (GPRA) enacted by Congress in 1997, requires federal agencies to identify a set of core performance indicators for which they will be held accountable. SAMHSA was required to identify and select performance indicators for GPRA in the late 1990s. Based on early work by the Five-State Feasibility Study and a set of regional stakeholder meetings, six measures were selected for GPRA reporting. These measures became the basis for voluntary reporting by states as part of their annual mental health block grant applications. However, the measures selected for GPRA have been often difficult for State Mental Health Authorities to report in a uniform fashion, and thus, to date, the GPRA measures have not been well reported.

Block Grant Performance Measures from States: Uniform Reporting System:

In 2001, SAMHSA published an announcement of its Uniform Reporting System (URS) in the Federal Register. The new URS contains a set of "basic" and "developmental" performance indicator tables for states to report. Reporting of the URS basic tables began in 2002, with full reporting by all states expected by 2004. The developmental tables include indicators that either still need some operational definitions or will be more difficult for states to report comparably. The developmental indicators will be reported by states on a slower basis, with states working to define and test reporting them by 2004.

The URS builds heavily upon the work of the 16-State Study. The tables included in the basic set of the URS are indicators that the

majority of states were able to report in the 16-State Study and for which good operational definitions exist. Measures in the developmental set of the URS are either those for which standardized definitions do not exist or for which data are not comparable. The work of the 16-State Study will inform the development of the standardized definitions that are needed.

To accompany the URS, SAMHSA State Mental Health Data Infrastructure Grants (DIGs) were made to 49 states, the District of Columbia, and 7 US territories to help them modify their information system infrastructure to report the performance indicators of the URS. Each of the DIG states and territories received a 3-year grant of \$100,000 per year to support their work to enhance their information systems to report URS data. In addition, the NRI received funding from SAMHSA to serve as a national coordinating center, to work with the states in their DIG and URS activities. As part of its role, the coordinating center facilitates the development of final standardized definitions, provides technical assistance to states, and will compile and report URS data from the states.

16-STATE STUDY APPROACH

The 16-State Study project, initiated in 1998, was a three year collaborative project between the state mental health agencies in 16 states and SAMHSA. In each of the participating states, representatives of both the data and management information systems offices and their mental health planning offices were part of the project. In addition, most states involved additional stakeholder groups, such as consumers, family members, and other advocates in their conduct of the project. The inclusion of consumers and other stakeholders was a consistent expectation of the project to ensure that study activities remained relevant to the persons served by state systems.

The 16-State Study was conducted without a formal coordinating center. To facilitate and

coordinate the 16-State Study, a model was adopted that emphasized extensive interstate communications through the use of Internet technologies such as web sites and a list serv. Throughout the study extensive communications were maintained between the states and the Federal government. All participants met face-to-face only twice during the project. Regular communications were facilitated by monthly conference calls and an e-mail list serv was used to share data definitions, draft reports, and to both request and compile data.

Key to the accomplishments of the 16-State Study was the development of a set of 19 different Indicator Workgroups. The Indicator Workgroups included volunteer groups of grant principal investigators and other grant participants who revised the Five-State Study definitions, compiled data from all states, and prepared reports on their sets of indicators. The 16-State Study Indicator Workgroups are listed in Table 1.

Each Workgroup reviewed the experiences of the Five-State Study and developed updated recommended operational definitions. The recommended operational definitions were discussed with all 16 states on a conference call and the workgroup then issued a request for data from all participating states. The workgroup compiled data from the states into a draft report, and sent the report to the states for their review and modification. After review by the states, the workgroup prepared a final report and then sent the data and report for incorporation into this final 16-State Study report.

A Reporting Workgroup was established to develop a standardized set of reporting categories for all indicators. The workgroup based its efforts on the reporting categories of the Five-State Feasibility Study, and developed a standardized template used by all workgroups. The final set of recommended reporting categories included measures of consumers age, gender, race/ethnicity, and diagnosis. For some indicators, data were also

Table 1: 16-State Study Indicator Workgroups

Workgroup
A1. Penetration/Utilization Rates
A2, Q1, Q4, O1. Adult Consumer Survey
Children and Family Consumer Survey
Q3. Consumers are Contacted Within 7 Days of Discharge
Q11 Readmission w/in 30 days
S3: Costs
Q2: Consumers linked to primary health care
O3: Employment
O9: Mortality
O12: Living Situation
O13(a): Criminal Justice Data --Self Report Data
O13(b): Criminal Justice Data --Linking to Criminal Justice
Q5. Percent of Adults with SMI Receiving ACT
Q6: Percent of Adults with SMI Receiving Supported Employment
Q7: Percent of Adults with SMI Receiving Supported Housing
O4: Level of Functioning
O5: Symptoms
O14: Recovery: when available
O11: Reduced Substance Abuse
S1: Stakeholder Involvement in Policy and Planning
Q8: Percentage of Adults with Schizophrenia Receiving New Generation Anti-psychotic (atypical) medications
Q12: Seclusion Rate
Q13: Restraint Rates
Q14: Medication Errors
O6: Injuries
O7: Elopements

compiled for combinations of age and race/ethnicity.

As a result of these common reporting categories, virtually all performance indicators compiled by the 16-State Study can be generated for either the total served population or for various client subgroups. Thus, the 16-State Study indicators are able to demonstrate differences in sub-groups of consumers to determine whether utilization rates, access to new generation medications, or employment status vary based on the gender, race/ethnicity, age, or principle diagnosis of consumers. Some indicators, such as the use of new generation “atypical” antipsychotic medications for persons with schizophrenia, were, by definition, limited in the consumer population categories compiled (i.e., only persons with a diagnosis of schizophrenia). The standardized reporting categories used by the 16-State Study are listed in Table 2.

Where individual indicators did not use the full array of reporting categories listed in this table, these exceptions are discussed in the narrative of individual indicators. Most states were able to report both indicator totals and the requested subpopulation categories. States had the greatest difficulty reporting on subpopulations by diagnoses.

Several of the 19 workgroups were able to work much faster than others. This was usually because the assigned indicators were in areas that had already been developed by the Five-State Study and that states already had the capacity to report. For example, the Utilization Rate Workgroup was able to compile data from all 16 states for all three years of the grant.

Other workgroups spent considerable effort designing and piloting their indicators, and as

Table 2: 16 State Study Standard Consumer Reporting Categories:

AGE	ETHNICITY	DIAGNOSIS
0-3	White/Caucasian	Attention Deficit (314)
4-12	Hispanic	Conduct Disorder (312.8, 312.9, 313.81)
13-17	African American	Mental Retardation, Autism, and Specific Development (299, 315 except 315.4, 317 - 319)
18-20	Asian/Pacific Islander	Other Childhood Disorders (307.0, 307.2-307.23, 307.52-307.59, 307.6-307.7, 307.9, 313.23, 313.89, 313.9, 315.4, 787.6)
21-30	Native American	Schizophrenia (295)
31-45	Other	Other Psychotic Disorder (297, 298)
46-64		Depressive and Other Mood Disorders (296, 300.4, 301.13, 311)
65-74		Subset of Depressive Disorders: 311
75 +		Optional Breakdown for this category:
NOT AVAILABLE		Bipolar disorder (296, 296.4, 296.5, 296.6, 296.7, 296.8, 296.89)
GENDER	MAJOR MENTAL ILLNESS DIAGNOSES	
Male	Adults w/ Major Mental Illness (age 18 & over & DSM: 295, 296, 297, 298)	Major Depression (296.2, 296.3)
Female	Subset of Adult Illnesses (297 and 298)	Other Mood Disorders (296.9, 300.4, 301.13, 311)
	Other Adults	Dementia, Delirium & other Related Disorder due to a medical Condition (290, 293, 294, 331)
	Children w/ Major Mental Illness (under age 18 & DSM: 295, 296, 297, 298)	Substance Abuse (291-292, 303-305)
	Subset of Child Illnesses (297 and 298)	Anxiety (300-300.02, 300.3, 308.3, 309.21, 309.81, 300.21)
		Subset of Disorders: 300.21
	Other Children	Personality Disorders (301 except 301.13, 312.3)
		Other MH Diagnoses
		No Diagnosis, Deferred, Not Available

a result either only compiled data from a few states or never compiled indicator results from the states. Finally, several Indicator Workgroups were initiated near the end of the grant cycle, and, thus, had insufficient time for states to compile and report needed data.

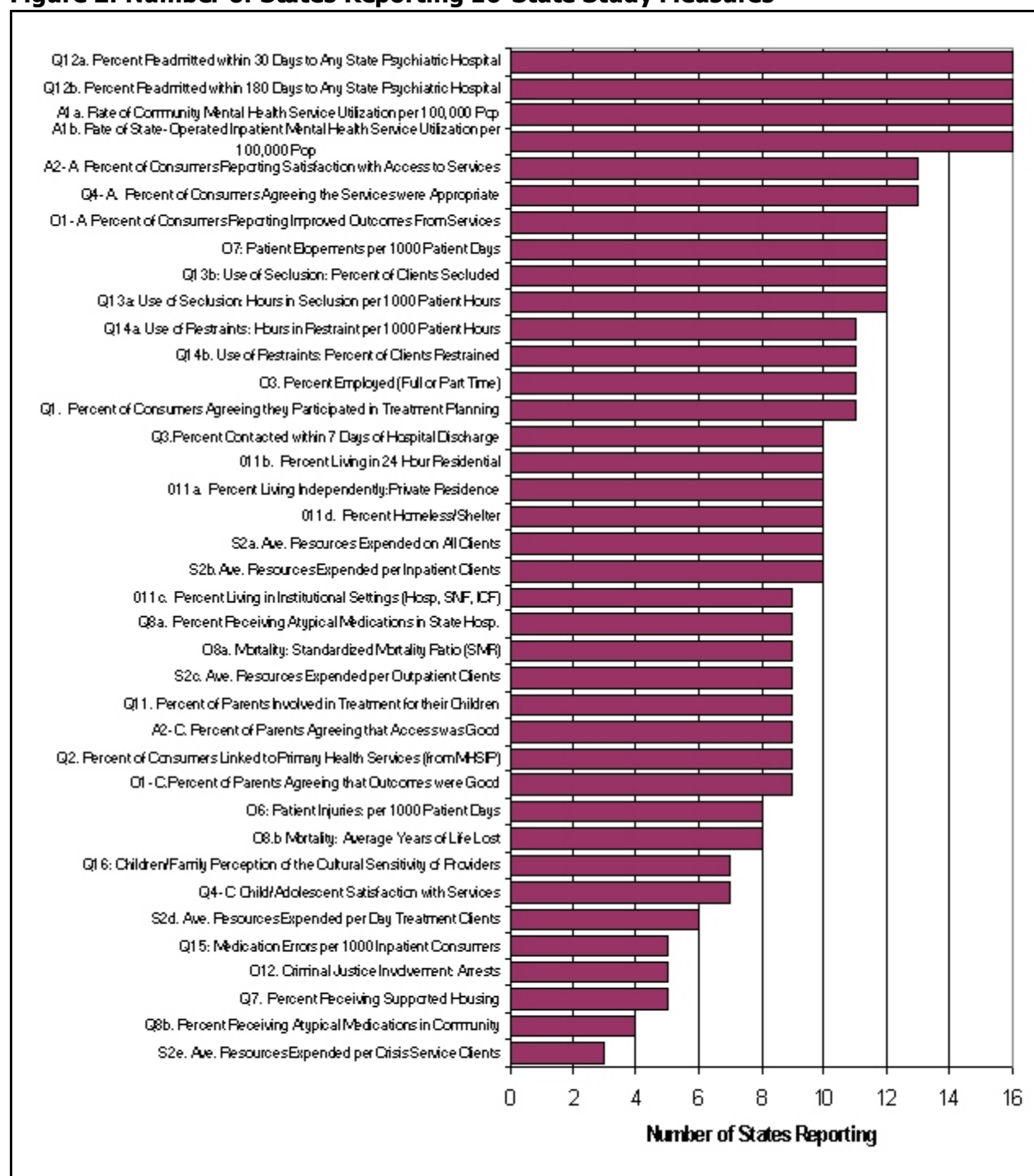
Producing reports using standardized definitions took intensive work from multiple participants in each of the states. Project participants met twice to coordinate and assure measure standardization. Many of the Indicator Workgroups met face-to-face, and all held multiple conference calls and extensive e-mail correspondence to operationalize their indicators, gather data, analyze and disseminate tables and graphics, and produce their final indicator reports.

Most of the Indicator Workgroups compiled data for State FY2000. Some states were able only to report indicator data for years FY1999

or FY2001. Each of the Indicator Workgroups prepared a report on their activities. For most of the Workgroups, these reports included results from many of the 16-State Study states depicted by the core set of client characteristics. Other workgroup reports focused on the development of new instruments to be used in future performance indicator initiatives (e.g., Children's Survey Workgroup, and the Evidence-Based Practices Workgroup). Still other workgroups identified additional developmental work that remains to be completed before a comparable performance indicator can be proposed and tested.

Two ground rules were established for presenting data in this report. First, results are shown only when 3 or more states reported data for the indicator. Second, rates by a particular client characteristic are shown when there are at least 25 cases in a specific

Figure 2: Number of States Reporting 16-State Study Measures



subpopulation group. For example, readmissions by the race/ethnicity subgroup Native Americans would not be shown if there were fewer than 25 Native Americans in the hospital discharge population for a given state.

KEY FINDINGS

Ability of States to Report Standardized Measures

The 16-State Study found that State Mental Health Authorities can report comparable measures desired by consumers, families, funders, and others on their systems. Figure 2 and Table 3 (page 11) show that State Mental Health Authorities can implement and report on many comparable measures of performance of their mental health systems, provided they have sufficient time and appropriate resources.

Thirty-eight of the performance measures were developed to the point that standardized data were compiled from at least some of the 16 states. All 16 states were able to report data for four of the measures (10% of the measures). Overall, 28 measures (74%) were reported on by over half the states. In addition, several states had begun implementation of some of these performance measures during this project, although they were not able to report indicator results in time for inclusion in this report.

State Reporting

Due to the large number of measures tested, and the fact that final operational definitions were not completed until late in Year 3 of the project for some measures, no state was able to report data for every measure. Figure 3 shows the number of measures that states were able to report. Some states reported measure results only by using definitions different from the standardized definitions developed for this study. It should be noted that many of the 16-State Study participants had “no cost” extensions that have allowed them to implement additional standardized performance measures after the completion. Participating states have also continued to develop and utilize additional different performance measures specifically relevant

to their state’s needs and priority concerns.

Measures States Could Report

As shown in Table 3, measures of appropriateness relative to inpatient care, such as readmission rates within 30 days and 180 days; the use of new generation “atypical” antipsychotic medications in state psychiatric hospitals; seclusion and restraint rates in psychiatric hospitals; and contact in the community within 7 days of hospital discharge were reported by more than half of the sixteen states. Outcome indicators, such as living arrangements, percent homeless, employment status, and mortality rates were also reported by at least half of the participating states. Access measures of utilization rates of community and inpatient services were reported by every participating state.

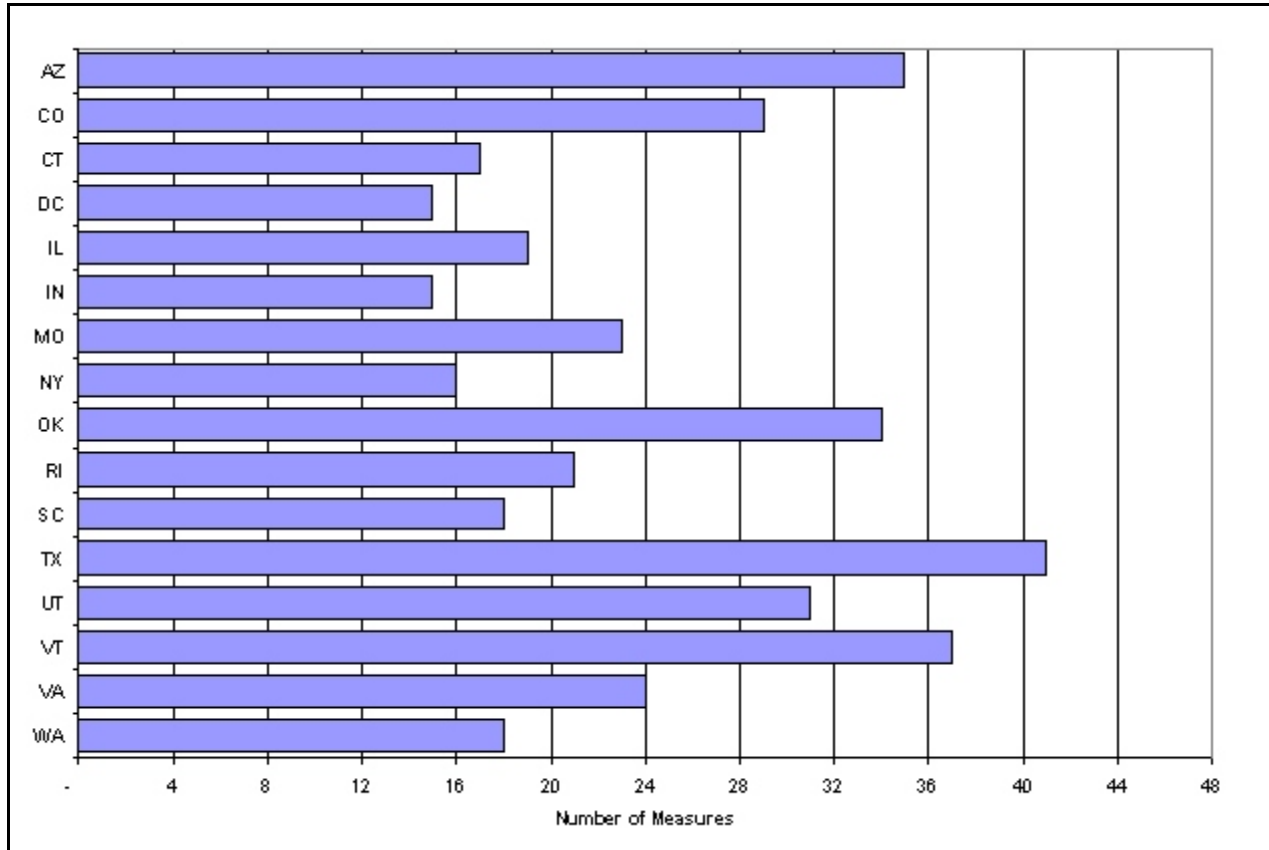
The measures of outcomes of service—such as improvement in functioning, reduction in psychiatric symptoms, criminal justice involvement, and improvements in school behavior—were the measures with the least comparability. Many states have their own definitions for these measures which are used within the state for quality and accountability purposes. However, these measures, when used, are seldom the same across states. In general, measures that required State Mental Health Authorities to link their data set to other data sets, such as criminal justice records were more difficult to implement because of technical and inter-agency issues.

The ability of states to report measures may be related to the sources of the indicator data. Only four measures were reported by all 16 states: hospital utilization, community service utilization, and hospital readmissions within 30 days and 180 days. This suggests that states were more able to report indicators from administrative datasets that are included in information systems operated by all the State Mental Health Authorities.

Table 3: 16-State Study of Mental Health Performance Indicator Results: 2001

PERFORMANCE INDICATORS	FEASIBILITY	PERFORMANCE		
	Number of States Reporting	Median Score	Low Score	High Score
OUTCOME INDICATORS				
C1-A. Percent of Consumers Reporting Improved Outcomes From Services	12	69.4%	57.5%	83.9%
C1-C. Percent of Parents Agreeing that Outcomes were Good	9	57% Average on YSS, 46% on YSS-F		
C2. Improvement in School Behavior		Added questions to the YSS and YSS-F		
C3. Percent Employed (Full or Part Time)	11	23.1%	13.8%	37.5%
C4. Improvement of Functioning		Reviewed Methods Comparing Different Instruments		
C5-A. Reduction in Symptoms		Reviewed Methods Comparing Different Instruments		
C6. Patient Injuries per 1,000 Patient Days	8	0.51	0.02	7.75
C7. Patient Elopements per 1,000 Patient Days	12	0.27	0.02	0.77
C8a. Mortality: Standardized Mortality Ratio (SMR)	9	2.20	0.60	3.20
C8b. Mortality: Average Years of Life Lost	8	27.35	13.50	31.80
C9. Recidivism		Developing Measures for Future Use		
C10. Reduced Substance Abuse Impairment		Reviewed Methods of Measuring and Reporting		
Living Situation				
O11a. Percent Living Independently/Private Residence	10	86.3%	50.4%	91.0%
O11b. Percent Living in 24 Hour Residential	10	6.3%	3.1%	37.3%
O11c. Percent Living in Institutional Settings (Hosp, SNF, ICF)	9	3.1%	0.3%	8.7%
O11d. Percent Homeless/Shelter	10	2.6%	1.2%	6.2%
C12. Criminal Justice Involvement: Arrests	5	9.5%	6.1%	13.7%
APPROPRIATENESS/QUALITY INDICATORS				
Q1. Percent of Consumers Agreeing they Participated in Treatment Planning	11	72.3%	64.1%	87.0%
Q2. Percent of Consumers Limited to Primary Health Services (from MHSP)	9	Developed and Tested Consumers Survey Questions		
Q3. Percent Contacted within 7 Days of Hospital Discharge	10	41.9%	20.0%	79.4%
Q4-A. Percent of Consumers Agreeing the Services were Appropriate	13	79.4%	72.0%	90.1%
Q4-C. Child/Adolescent Satisfaction with Services	7	65% Average on YSS, 64% on YSS-F		
Use of Evidence-Based Services				
Q5. Percent Receiving Assertive Community Treatment		Developed and Tested Fidelity Measure		
Q6. Percent Receiving Supported Employment		Developed and Tested Fidelity Measure		
Q7. Percent Receiving Supported Housing	5	4.6%	1.4%	7.7%
Q8a. Percent Receiving Atypical Medications in State Hosp.	9	73.5%	24.3%	93.4%
Q8b. Percent Receiving Atypical Medications in Community	4	57.6%	44.4%	69.5%
Q9. Percent Children Living in "Family Like Settings"		Added questions to the YSS and YSS-F		
Q10. Percent Children in Therapeutic Foster Care		Added questions to the YSS and YSS-F		
Q11. Percent of Parents Involved in Treatment for their Children	9	56% Average on YSS, 73% on YSS-F		
Q12a. Percent Readmitted within 30 Days to Any State Psychiatric Hospital	16	8.2%	0.3%	13.6%
Q12b. Percent Readmitted within 180 Days to Any State Psychiatric Hospital	16	18.1%	3.1%	29.2%
Q13a. Use of Seclusion: Hours in Seclusion per 1,000 Patient Hours	12	0.42	0.02	6.21
Q13b. Use of Seclusion: Percent of Clients Secluded	12	6.3%	1.5%	25.7%
Q14a. Use of Restraints: Hours in Restraint per 1,000 Patient Hours	11	0.50	0.02	2.44
Q14b. Use of Restraints: Percent of Clients Restrained	11	9.97%	1.0%	14.0%
Q15. Medication Errors per 1,000 Inpatient Consumers	5	81.22	36.30	459.26
Q16. Children/Family Perception of the Cultural Sensitivity of Providers	7	76% Average on YSS, 82% on YSS-F		
ACCESS INDICATORS				
A1a. Rate of Community Mental Health Service Utilization per 100,000 Pop	16	1,686	852	3,282
A1b. Rate of State-Operated Inpatient Mental Health Service Utilization per 100,000 Pop	16	69.5	14.0	439.0
A2-A. Percent of Consumers Reporting Satisfaction with Access to Services	13	81.8%	68.2%	92.2%
A2-C. Percent of Parents Agreeing that Access was Good	9	66% Average on YSS, 74% on YSS-F		
STRUCTURE/PLAN MANAGEMENT INDICATORS				
S1. Consumer/family participation in policy and planning		Surveyed States to Develop Future Measures		
S2a. Ave. Resources Expended on ALL Clients	10	\$3,167	\$2,425	\$4,006
S2b. Ave. Resources Expended per Inpatient Client	10	\$12,415	\$8,480	\$33,166
S2c. Ave. Resources Expended per Outpatient Client	9	\$1,852	\$654	\$3,076
S2d. Ave. Resources Expended per Day Inpatient Client	6	\$5,824	\$2,773	\$8,940
S2e. Ave. Resources Expended per Crisis Service Client	3	\$631	\$422	\$699
States reported using standardized definitions, however differences in state policies, priorities, and service populations may make results non-comparable.				
Source: NASMHPD Research Institute, Inc., 2002				

Figure 3: Number of Performance Measures Reported by State (48 possible)

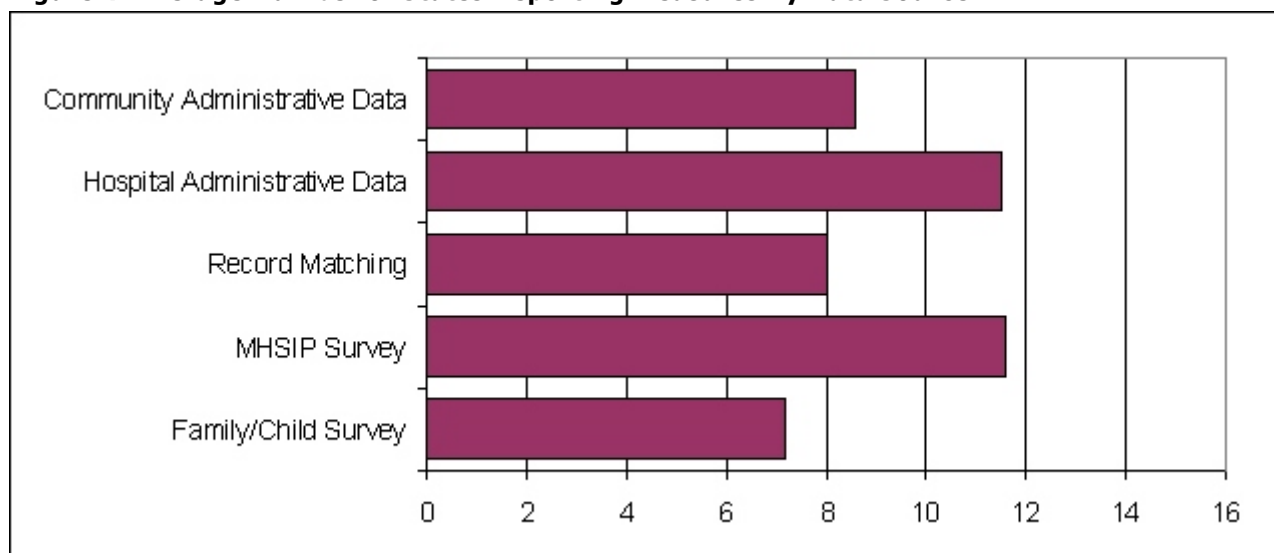


Other indicators that rely on consumer status information such as living arrangements and employment status were also reportable by many states, once standardized reporting categories were developed. Additionally, consumer survey generated indicators were

reported by 13 of the states, demonstrating the broad application of the MHSIP Consumer Survey.

Figure 4 shows the average number of states reporting data by various types of indicators,

Figure 4: Average Number of States Reporting Measures By Data Source



grouped on the sources of data used to generate the indicators. As discussed above, indicators based on single information systems maintained by State Mental Health Authorities generally had the highest level of reporting (hospital data sets, community utilization data, consumer surveys), whereas indicators that rely on matching data records with other information systems, such as criminal justice contacts, mortality rates, and follow-up in the community after hospital discharge proved more difficult for many states to report. Finally, client assessment measures were particularly difficult for states to report due to differences in instruments and frequency of assessments.

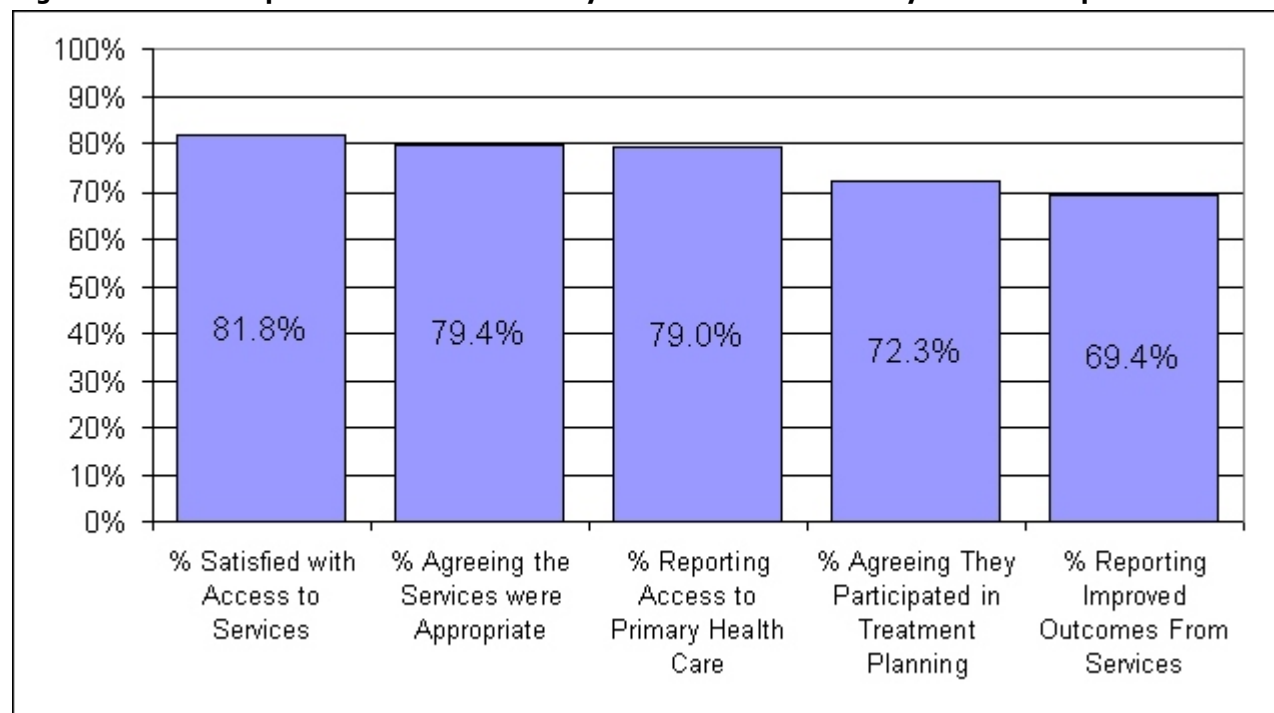
Consumer Survey Measures

The MHSIP Adult Outpatient Consumer Survey, adapted from the MHSIP Consumer-Oriented Report Card published by SAMHSA in 1997, is being implemented in most states to assess consumers' perceptions of the outcomes, access, and appropriateness of public mental health services, consumer's participation in treatment planning, and contacts with physical healthcare. Thirteen

states were able to report data using the MHSIP Consumer Survey. Each of these states use similar instruments, and the workgroup was able to calculate scores for comparable indicators and domains from these surveys. However, states implemented the consumer survey using different survey methods, surveyed different client populations, and attained variable response rates, suggesting that caution should be used in comparing survey results across states.

The MHSIP Consumer Survey revealed differences across domains that were consistently observed for individual states (see Figure 5). More consumers were satisfied with their access to mental health care and with the appropriateness of the services; fewer consumers were satisfied with either the outcomes of treatment or with their level of participation in treatment planning. Nearly 82% of consumers surveyed by the states strongly agreed or agreed that they had access to needed services. Over 79% of consumers surveyed agreed appropriate services were delivered; 69% reported improved outcomes as a result of these services.

Figure 5: Adult Outpatient Consumer Survey Results: 16 State Study Median Responses



Groundwork for Reporting New Measures

The 16-State Study participants found that several measures of great interest to states lacked standardized definitions that limited the utility of reporting. In some cases, Indicator Workgroups completed important work to develop “fidelity” measures that will facilitate future reporting of standardized performance indicators. For example, despite widespread agreement that measures on access to evidence-based practices (EBPs) such as Assertive Community Treatment (ACT) and Supported Employment are important indicators to measure, earlier efforts to compile these indicators failed due to the lack of agreement about measuring these evidence-based services. The 16-State Study workgroup on EBPs developed and successfully pilot tested fidelity “checklist” instruments that can be used in future studies to determine which programs and services should be counted for indicators of ACT and Supported Employment.

Similarly, 16-State Study workgroups on Criminal Justice Involvement, Children and Adolescent Perception of Care, Substance Abuse Impairment, Consumer Participation in Planning and Policy Development, Recovery, and Client Assessment Instruments, conducted work required to operationalize consistent measures in their domains. As a result of these workgroups, an adolescent and parent consumer survey now exists and is being implemented in many states. This survey will be used by states to provide information for eight different important child indicators. States interested in indicators of criminal justice, substance abuse, and participation in policy and planning now have a solid base of developmental work from which to proceed.

Other indicators, such as the use of client assessment instruments to measure the improvement in client functioning, reduction of symptoms, and reduction of substance abuse impairment require additional development. The 16-State Study workgroups have

documented that many states are routinely measuring these important indicators, but difficulties in reconciling different instruments being used by states was beyond the resources available to this project.

An important future product of the 16-State Study may be the development of standardized measures of how the mental health system supports “recovery” from a consumer’s perspective. The 16-State Study initiated a process and coordinated focus group meetings in eight states with consumers to define and operationalize measures of how mental health systems help and hinder consumers in their process of recovery. The work on recovery was, and continues to, be led by a group of consumer researchers who have defined the process and methodology for the development of this measure. This work on measures of recovery is ongoing; several new recommended measures should emerge later this year. Future work will be needed by states and others to test and implement these new measures of recovery.

Ability of the States to Demonstrate the Impact of Mental Health Services

The project also suggests that state mental health systems are delivering effective services to individuals with serious mental illnesses. State Mental Health Authorities provide mental health services for individuals most in need (i.e., persons with serious mental illnesses who lack adequate insurance to receive appropriate services from private providers). The 16-State Study documented that the consumers served by state systems frequently were unemployed (76.9%), homeless (2.6%), and disproportionately minority group members (31%).

State mental health authorities have been working actively to develop and implement meaningful measures of the performance of mental health programs for several years. The State Mental Health Authorities, the primary organizations responsible for funding,

monitoring, and delivering public mental health services in the nation, have recognized the need to better understand the outcomes of the services they deliver. In this project they have helped document services they deliver and the impacts and outcomes of these services on the lives of individuals with mental illnesses.

General Caveats and Cautions on Comparing Results

While the states have made significant progress in developing and reporting performance measures, substantial work remains to assure that the measures are truly comparable across states. Major policy and regulatory differences among the states must be understood to be able to compare the results of performance measures correctly. For example, the indicator on employment found that persons with serious mental illnesses were less likely to be competitively employed than were persons with other diagnoses. It then becomes important to understand the extent to which an indicator of employment is being reported for comparable populations. If a state reports on a broad population with a small proportion with major mental illnesses, they are likely to show a higher employment rate than a state that reports only on persons with serious mental illnesses.

Participants in the 16-State Study expended most of their time and effort in the development of standardized definitions and the compilation and reporting of information according to these definitions. Since the study was designed to determine the feasibility of states to report quickly a core set of mental health performance measures, the project did not have either the resources or time to fully explore all of the policy and programmatic differences that could explain differences in apparent performance on specific indicators. Since we cannot explain or account for all the program, policy, and population differences inherent in state systems, this report presents aggregate results from the study and

discusses specific indicators including major cautions when discussing specific state results. For many of these measures, comparisons of the performance of an individual state across time is an appropriate use of the indicator. Although some states reported the indicator using identical indicator definitions, they may have such different policy mandates and consumer caseloads that the indicators results may not be comparable across states. As additional work is completed to compile and report performance measures from the states, it will be essential to track, not just the actual measure results, but also underlying policy and program differences that will help explain differences in performance indicator values.

Considerable work remains to assess how states, consumers, family members, providers, and other advocates are using these performance indicators to improve care. The 16-State Study devoted its efforts to gathering these indicators, but has not had sufficient time or resources to evaluate how these indicators are best used to improve mental health services.

Due to many differences among the states, one option would have been to present the data for each state individually. However, to assist the reader, state data are displayed side-by-side to consolidate state-specific results. Although underlying trends may appear similar across the states, the reader is cautioned against drawing such conclusions, since multi-dimensional differences among states may make such findings either inaccurate or spurious.

Furthermore, although a reader may be tempted to extrapolate the 16 state results to the entire nation, such an effort would be misplaced: the project cannot approximate national estimates using data from only 16 highly variable states and territories. Readers should realize that the range of data for the

measures across the 16 states may not reflect the range of differences that might be observed if data and information from all 55 states and territories were included in an analysis.

CONCLUSIONS

The 16-State Study demonstrated that State Mental Health Authorities have the capacity and ability to implement and report on a standardized set of performance indicators. The work of the 16-State Study has developed operational definitions for indicators that have been implemented by many of the 16 participating states, and that are ready to be used by other states and mental health providers.

The 16-State Study workgroups developed operational definitions for indicators such as: utilization, consumer perception of care, employment, living situation, use of medications, state hospital readmissions, follow-up in the community after hospital discharge, use of seclusion and restraint in psychiatric hospitals, elopements from hospitals, and injuries in hospitals that were reported by many of the 16 states. These indicators form a solid basis for the next generation of national performance indicator efforts.

In addition to the indicators for which the 16-State Study developed and compiled indicator results, a substantial contribution was made to the field in the development of new measures. For example the generation of fidelity checklist instruments for evidence-based services such as Assertive Community Treatment and Supported Employment will enable future performance indicator initiatives to have a much better measure of these services. A listing of 16-State Study accomplishments related to performance measurement development includes:

- 1 Generating a child and adolescent consumer survey.

- 2 Developing fidelity instruments for evidence-based services.
- 3 Refining and better understanding the use of the MHSIP Adult Ambulatory Consumer Survey, including scoring methods to generate five different indicators: consumer perception of access, appropriateness, outcomes, access to primary healthcare services, and participation in treatment planning.
- 4 Developing a new set of measures of how the mental health system supports recovery from a consumer's perspective. This ongoing work should lead to the recommendation of both new consumer survey items, and other measures of how well mental health systems help or hinder consumers in their recovery process.
- 5 Comparing consumer assessment instruments of functioning and symptoms, which may lead to the development of methods to compare results across programs that use different consumer assessment instruments.
- 6 Identifying methods of measuring the criminal justice contacts of persons with mental illness used by many states. The report includes recommendations for new ways of measuring and reporting on this important aspect of mental health care.
- 7 Developing measures on the role of consumers and family members in informing and participating in policy development, planning, and quality assurance activities within the public mental health systems. These areas were explored by a workgroup of states. Their report identifies important new areas that may become the basis for new performance indicators on this often ignored aspect of mental health systems.

Much work remains to assess how states, consumers, family members, providers, and other advocates are using these performance

indicators to improve care. The 16-State Study devoted its efforts to gathering these indicators, but has not had sufficient time nor resources to evaluate how these indicators are best used to improve mental health services.

Implications for the Future

This study represents a major advance in the standardization and comparability of performance measures across state mental health systems. This study shows that with appropriate financial and administrative support states can report standardized performance measures on their mental health systems. Measures reported demonstrate that state mental health services help consumers recover and generate positive outcomes. However, major outstanding issues remain related to the development, implementation, and use of performance measures. These include issues related to definitions, comparability and use, and the significance and weight of various measures.

Issues Related to Definition

While standardized operational definitions were developed for the 16-State Study, these need further refinement and evaluation. At this stage, little empirical support exists for some of the definitions selected. For performance measures related to services, a major issue is the assurance that the critical components of the service are in place—that is, that there is fidelity to the model or operational conformance to some standard for the specific service. For performance measures related to symptoms and functioning, a major issue is the comparability specific instruments. Many of the 16 states are implementing measures related to monitoring changes in level of functioning and reduction in symptom distress but the instruments being used are different. Even when the instruments are the same, the durations between points at which measurements are taken may differ. The challenge is to develop consistency in both definitions and methodology and to develop reports at a higher level to incorporate

operational variations.

Issues Related to Comparability and Use

Some of the issues discussed under definitions clearly have an impact on the comparability of measures. However, even when the same standardized definitions are used, issues related to comparability remain. State Mental Health Authorities have different mandates and responsibilities related to populations covered and services provided. Some states provide services only to persons with serious mental illnesses and children with serious emotional disturbances (SED); others have a broader mandate. Some State Mental Health Authorities do not have responsibility for inpatient care. Some states can track only a segment of clients served by contracted providers. These differences make comparability and benchmarking across states a non-trivial issue. For measures that multiple states can report (e.g., penetration/utilization rates) the interpretation of results require including this additional contextual information.

Issues Related to Significance and Weight of Various Measures

Measures reported in this study represent different concerns and aspects of care and recovery. No judgements or analyses have been conducted to assess whether one performance measure should be given more weight or significance than another. Even within a domain, how these performance measures should be weighted relative to each other is not defined.

Recommendations for Future Developmental Efforts

Reviewing the work in this study and looking ahead toward future efforts leads to the following recommendations:

- The measures developed and tested by the 16-State Study should be a starting point for future efforts such as the SAMHSA Uniform Reporting System. The states developed common operational definitions for 32 performance indicators

encompassing 49 different measures that may be considered for future state and Federal initiatives.

- Assessment of the utility and desirability of the selected measures is needed. The 49 measures tested by the 16-State Study were derived from the Five-State Feasibility Study and the NASMHPD Framework of Performance Indicators. Several measures that are considered important by consumers, family members, and mental health administrators were not included in the 16-State Study since standardized definitions did not exist and the states could not report them comparably at this time. The 16-State Study has helped promote the development of measures of a consumer's recovery, but this work is not yet complete. Future performance indicators need to better incorporate measures of recovery from a consumer's perspective.
- Performance indicators on outcomes related to consumer functioning and symptom reduction need further work and are challenging to implement comparably. Although many of the participating states routinely measure client functioning and/or symptom reduction over time, states use many different assessment instruments. Before these items can be included in national reporting, states need assistance in developing, implementing, and automating client assessment records. As long as states are implementing different instruments, comparability will be questionable. Sensitivity analyses must be conducted to allow the comparison of different instruments across states.
- Children's mental health indicators need further development and refinement. The 16-State Study completed major work in developing and pilot testing consumer surveys for children and adolescents. The Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F) were successfully tested and are now being

implemented by many state mental health systems. The 16-State Study compiled information on the age of consumers for each indicator, allowing the comparison of performance on indicators between children, adults, and elderly persons. However, the development of child specific outcome instruments, and the identification and operationalization of best practice appropriateness measures for children's mental health is still needed.

- Client status indicators, such as percent employed, percent homeless, and percent of mental health consumers involved in the criminal justice system need additional refinement. The Workgroups' recommendations were to migrate these indicators from measuring consumer status at one point in time to becoming client outcome measures by using comparable measures at both the initiation of treatment and the end of an episode of treatment to measure change in consumer status. Unfortunately, the 16-State Study found that these measures were available generally only as snapshots of client status, and that calculations of change were not feasible currently.
- The comparability of results from different data collection/aggregation methods needs to be investigated. Several of the client status indicators were calculated differently by individual states, leading to concerns about the comparability of the observed rates. For example, criminal justice system contacts are measured in some states by linking mental health data to information systems from the corrections department. Other states calculated this measure via consumer surveys or clinician surveys. Until the sensitivity and correspondence of different methods are tested, the data may not be comparable.
- States have benefitted from the sustained federal effort to develop standardized

performance measures. The 16-State Study grants provide essential infrastructure to help states implement common measures, but were time limited and of relatively small size. Each of the 16 states spent significant state dollars to build performance measurement information systems to enable their participation in this project. The SAMHSA/CMHS Data Infrastructure Grants (DIGs) will provide some of the resources needed to help states implement systems to assure comparable reporting capacities. However, it should be noted that SMHA information systems currently spend several hundred million every year. Although \$100,000 per year Federal grants will help, the DIG resources may not be sufficient to permit every state to implement all the performance indicators tested in this project.

- Ongoing coordination of Federal and state performance indicator activities are needed in three main areas: the coordination of future state efforts to implement performance measures; the provision of needed technical assistance including techniques and methods for risk adjustment, data display, and consumer survey methods; and the cooperative development and testing of new measures of recovery and client outcomes with states and other stakeholders.

Section II: Results on Individual Performance Indicators

INDICATOR: A1 PENETRATION/UTILIZATION RATES

RATIONALE FOR USE: This indicator addresses the fundamental issue of whether persons with mental illnesses are receiving mental health services and whether the system is responsive to various consumer populations. In managed care settings, penetration rates have been reported for Medicaid managed care ranging from 1% to 7%. Benchmarks clearly need to be established for various subpopulations. In non-managed care settings, similar benchmarks are needed, but comparisons across states may be confounded by the different types of populations for which a state mental health authority is responsible. However, comparisons across subpopulation areas would be informative.

APPROACH TO MEASURE: The basic construct of this measure is to reflect the proportion of persons in the population or sub-population that is receiving services. For an enrolled population, the denominator is easily defined. The denominator for a more general population is more problematic. In this situation, the general population is recommended.

Penetration rates can be computed for various demographic breakouts, for various service categories and for different diagnostic groups. The workgroup has developed a general table from which different penetration rates can be computed. For the diagnostic and service categories, the denominators recommended are the state population.

MEASURE(S): Utilization rates per 100,000 population derived from unduplicated count of all individuals served each year, by break-outs by age (0-12, 13-17, 18-30, 31-45, 46-64, 65-74, 75+), ethnicity (White, African-American, Asian or Pacific Islander, Native American, Hispanic), gender, diagnosis, adults with serious mental illnesses or children with serious emotional disturbances, and setting (inpatient and community services).

Numerator: Unduplicated number of persons (in a category) served during the year:
Information is reported for State Fiscal Year 2000 for consumers in:

- 1) The total unduplicated number of people served in state psychiatric hospitals in each state. All individuals who spent time in a state hospital, regardless of legal status or diagnosis should be included. Counts should exclude non-state hospital-based inpatient programs and psychiatric hospitals operated by other branches of state government (e.g., correctional authorities), and
- 2) Community MH programs—Unduplicated count of all individuals served by community mental health programs that are operated or funded by the state mental health authority. All individuals served by these programs, regardless of insurance coverage or legal status should be included in these counts. Inpatient mental health programs should be excluded from these counts.

Denominator: State population in each of the standard 16-State Study reporting categories (age, sex, race/ethnicity). For diagnosis, the denominator is currently the total state population.

CURRENT IMPLEMENTATIONS STATUS: All of the 16-State Study states have reported data on utilization rates for state psychiatric hospitals and for community mental health programs. In addition to reporting on overall rates for community programs and state psychiatric hospitals, States also reported utilization rates for the number of people in combinations of demographic

categories (age, sex, and race/ethnicity). In the interest of manageability, states report only a limited number of categories for the current feasibility project. States reported the number of individuals in each of the 12 categories that are defined by two gender categories (male and female), two age groups (less than 18, and 18 and over), and two race/ethnic categories (White-Non-Hispanic and Other). The specific combinations are shown in the tables below:

STUDY RESULTS: The 16-State Study found that states vary substantially in utilization rates for persons with mental illnesses. This variation may be due to the different organizational structures, priority populations, and financing arrangements of the states. Community mental health utilization varied from a high of 3,282 per 100,000 population in Vermont to a low of 852 per 100,000 in Texas.

Overall, the median rate of utilization of public mental health services were higher for non-white than white individuals, in both community and state psychiatric hospital settings. Males had slightly lower utilization of state psychiatric hospitals than females. Adults had higher rates of utilization of both community mental health programs and state psychiatric hospitals than did children.

Community service utilization rates for non-white consumers were substantially higher than community service utilization rates for white consumers in all states except New York. There were only small differences between community service utilization rates for men and women.

Differences in community mental health service utilization by children and adults varied from state to state. In some states, children were served at a higher rate than adults, in some states children were served at a lower rate, and in some states children were not served by programs administered by the state mental health authority. Differences in the structure of human service agencies and differences in the sources of data for this project appear to make major differences on utilization rates.

Community Mental Health Utilization Rate per 100,000 Population: FY 2000							
		Age		Gender		Race	
	Total	Under 18	18 and Over	Male	Female	White	Non-white
Minimum	852	408	905	831	872	446	1,186
Maximum	3,282	5,135	2,706	3,208	3,353	3,246	6,048
Median	1,685.5	1,411.0	1,712.5	1,718.0	1,631.5	1,336.5	2,993.5
Arizona	1,810	1,867	1,787	2,039	1,585	1,353	5,403
Colorado	1,614	2,284	1,383	1,474	1,744	1,320	2,558
Connecticut	931	-	1,232	897	963	635	3,060
District of Columbia	1,757	1,309	1,858	1,848	1,678	446	2,468
Illinois	1,206	1,194	1,208	1,192	1,219	954	2,281
Indiana	1,270	1,306	1,258	1,394	1,153	1,048	3,353
Missouri	1,066	729	1,180	1,066	1,065	958	1,797
New York (1999)	2,020	1,411	2,219	2,063	1,980	1,549	3,017
Oklahoma	959	408	1,155	891	1,024	913	1,186
Rhode Island	2,465	2,678	2,385	2,494	2,439	2,156	6,048
South Carolina	2,251	3,154	1,956	2,444	2,071	1,929	2,970
Texas	852	720	905	831	872	560	2,420
Utah	1,952	2,062	1,808	1,945	1,958	1,813	4,646
Vermont	3,282	5,135	2,706	3,208	3,353	3,246	5,488
Virginia	1,587	1,387	1,638	1,619	1,557	1,436	2,063
Washington	1,916	2,199	1,812	1,817	2,014	1,725	3,411

State Psychiatric Hospital Utilization Rate per 100,000 Population: FY2000							
		Age		Gender		Race	
	Total	Under 18	18 and Over	Male	Female	White	Non-white
Minimum	14	2	18	23	6	9	57
Maximum	439	194	494	560	334	156	596
Median	69.5	33.5	85	89.5	46	47	145.5
Arizona	14	3	18	23	6	9	57
Colorado	58	56	59	69	47	45	213
Connecticut	63	-	85	84	44	42	217
District of Columbia	439	194	494	560	334	151	596
Illinois	76	11	99	102	50	49	189
Indiana	41	15	50	58	25	36	86
Missouri	137	47	168	184	93	108	337
New York	68	41	76	95	42	47	111
Oklahoma	87	31	108	111	65	82	116
Rhode Island	45	-	59	58	33	43	63
South Carolina	186	103	213	223	152	156	254
Texas	71	36	85	83	59	47	201
Utah	33	17	41	41	25	31	72
Vermont	41	2	53	60	22	39	168
Virginia	86	39	100	107	65	74	123
Washington	71	9	92	97	45	65	114

SOURCES OF INFORMATION: Administrative data, enrollment data.

POPULATIONS:

- Children with a Serious Emotional Disturbance
- Adults w/ a Serious Mental Illness
- All Children
- All Adults
- Geriatric

SETTINGS:

- Psychiatric Inpatient Settings
- Community-based Settings

ISSUES: Utilization rates must be considered in light of the larger public policy environment, the values underlying the system of care, and the values of the larger society. State mental health agencies have different missions and priority populations that may account for some of the differences in reported utilization rates across states. Utilization rates for various client groups within a given state can be a useful indicator of how well systems are doing at providing access to care to disadvantaged populations.

The workgroup also recommended states calculate this indicator for various regions within a single state. Comparisons of utilization rates within various regions of a state will reduce variation due to differing SMHA organizational structure and thus may better identify regions where there may be inadequate access to mental health services.

State-by-State Specifications

A. Community-Based Service Utilization Data

Arizona: Figures represent counts of people who receive community-based service from a Regional Behavioral Health Authority (RBHA). Duplicates are included for individuals served by more than one RBHA during the year.

Colorado: Figures represent unduplicated counts of people served by state funded community mental health centers and clinics. Figures are unduplicated using a constructed unique person identifier that is based on a name fragment (3 letters), date of birth, and gender.

Connecticut: Figures represent unduplicated counts across enrollments in mental health community programs. This number, however, does not include people who might have been seen by crisis teams only.

District of Columbia: Figures represent unduplicated counts of people served by community mental health centers. Figures are unduplicated on the basis of a unique person identifier.

Illinois: Figures represent an unduplicated count of the number of people who received grant-in-aid funded services. People who received services funded exclusively by Medicaid are not included in this count. It is estimated that the reported client counts represent an 11% undercount of the total number of people served by state funded programs.

Indiana: Figures represent an unduplicated count of the number of people enrolled in the Hoosier Insurance Plan (HAP) who were served by community mental health centers. People who received community mental health services funded through other means are not included.

Missouri: Figures represent an unduplicated count of comprehensive psychiatric services consumers served in community programs. Unduplicated counts are based on a statewide unique person identifier.

New York: Statistical methods for producing unduplicated counts of the number of people served in the community during the year are under review. Figures are available for FY1999.

Oklahoma: Figures include all individuals served by either state operated or contracted community mental health centers in Oklahoma. Figures are unduplicated using a constructed unique person identifier that is based on first and last initials, date of birth, and gender.

Rhode Island: Figures include all individuals served by community mental health centers in Rhode Island. These figures include duplication for individuals who were served by more than one community mental health center during the year. Duplication, however, is believed to be rare.

South Carolina: Figures represent an unduplicated count of all people served by 17 state operated community mental health centers. Unduplication is based on a statewide unique person identifier.

Texas: Figures represent an unduplicated count of Texas psychiatric outpatients. Unduplication is based on a statewide unique person identifier. Figures include individuals served by the Medicaid managed care pilot program, NorthSTAR. Consumers in this program may not meet the Texas mental health priority population definition.

Utah: Figures represent unduplicated counts of people served by state funded community mental health centers.

Vermont: Figures represent unduplicated counts of all people who received mental health services through community mental health centers in Vermont. Unduplication of person counts across regions of the state is based on Probabilistic Population Estimation.

Virginia: Figures include all individuals served by community services boards. Duplicates are

included for individuals served by more than one community service board during the year.

Washington: Figures represent an unduplicated count of all persons who were eligible for and received service from publicly funded mental health outpatient programs. Unduplication is based on a statewide unique person identifier that is based on name, date of birth, social security number, and gender.

B. State Hospital Utilization Data

Arizona: Figures represent unduplicated counts of individuals served by State Hospitals. Individuals who receive inpatient services under contract with a Regional Behavioral Health Authority but are not served by a state hospital are not included.

Colorado: Figures represent unduplicated counts of individuals served by State Hospitals. State Hospitals account for all inpatient services provided by the state mental health authority.

Connecticut: Figures represent unduplicated counts of individuals served by State Hospitals, excluding the forensic population and excluding people treated for a substance abuse diagnosis. Inpatient services are also provided under contract with local general hospitals in Eastern Connecticut and in local general hospitals for General Assistance recipients through managed care contract. These other locations are excluded from this report.

District of Columbia: Figures represent unduplicated counts of individuals who received inpatient services provided by St. Elizabeth's Hospital. This hospital accounts for all inpatient services provided by the District mental health authority.

Illinois: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. Individuals who received inpatient care purchased from community hospitals but did not receive state hospital services are not included in these counts.

Indiana: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. Indiana does not provide acute inpatient care at its state hospitals. This type of care is provided through case rate reimbursement to local hospitals and community mental health centers. Acute-care patients account for the majority of state-funded inpatient days. Consequently, Indiana's reported state hospital utilization rates significantly understate the actual use of state-funded inpatient services.

Missouri: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. Inpatient services are also provided under contract with other facilities. Individuals who receive inpatient services under contract with other facilities but are not served by a state hospital are not included in these counts.

New York: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. State hospitals account for all inpatient services provided by the state mental health authority.

Oklahoma: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. Inpatient services are also provided by state operated and private non-profit community mental health centers. Individuals who received inpatient care from community mental health centers but did not receive state hospital services are not included in these counts.

Rhode Island: Figures represent unduplicated counts of people hospitalized for psychiatric care in Rhode Island's state operated general hospital and services purchased under contract with a privately operated psychiatric hospital. Inpatient services are also purchased under contract with a privately operated psychiatric hospital. Individuals who receive inpatient services under this contract but are not served by a state hospital are not included in these counts.

South Carolina: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. State hospitals account for all inpatient services provided by the mental health authority.

The system is integrated which results in state facilities being a first line response for inpatient care, especially for indigent and involuntary admissions.

Texas: Figures represent unduplicated counts of individuals who received inpatient services are provided by State Hospitals. State hospitals account for all inpatient services provided by the state mental health authority.

Utah: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. Inpatient services are also provided by local community mental health centers with funding from the state authority. Individuals who receive inpatient services provided by community mental health centers but are not served by a state hospital are not included in these counts.

Vermont: Figures represent unduplicated counts of individuals who received inpatient services provided the Vermont State Hospital. This hospital accounts for all inpatient services provided by the state mental health authority.

Virginia: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. State hospitals account for all inpatient services provided by the state mental health authority. Forensic patients are not included in these figures.

Washington: Figures represent unduplicated counts of individuals who received inpatient services provided by State Hospitals. Inpatient services are also provided under contract with other facilities. Individuals who receive inpatient services provided under these contracts but are not served by a state hospital are not included in these counts.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: John Pandiani (Vermont)

INDICATOR: A2-A ADULT CONSUMER PERCEPTION OF GOOD ACCESS

RATIONALE FOR USE: Timely and convenient access to services are major values of the public mental health system and are major factors in ensuring that persons receive needed services.

APPROACH TO MEASURE: The consumers' perception of access complements the access measure related to penetration/utilization rates. While the latter is an indicator of persons who did not get into the service delivery system, consumer perception of access indicates ease of access and barriers encountered from the consumer's perspective.

The items comprising the Access domain in the MHSIP consumer survey were used to obtain a measure of the domain and are based on concerns related to this domain identified by consumers. The items reflect those that best represent the domain and include items related to location of service, frequency of contact, staff responsiveness and the availability of services.

These items are part of a larger survey that is usually conducted on a sample of adults who received services during a specified time period. The methodology of administration has varied across states, where some persons have used mail surveys and others have used face-to-face surveys. (While some studies suggest that differences in response rates are not significant, others suggest that there may be systematic differences based on administration methodology.) Also the populations covered and the samples selected varied considerably across states.

Survey results were for adults (age 18 and older) and did not include persons with a single diagnosis substance abuse. However, some states, by nature of their mandate included only persons with serious mental illness while others included a broader population. Comparisons across states without taking into account such differences are therefore questionable.

MEASURE(S): The items used to obtain the scores for perceptions of access are listed below.

Measure: MHSIP Consumer Survey: Perception of Access

1. The location of services was convenient.
2. Staff were willing to see me as often as I felt it was necessary.
3. Staff returned my calls within 24 hours.
4. Services were available at times that were good for me.

Scoring:

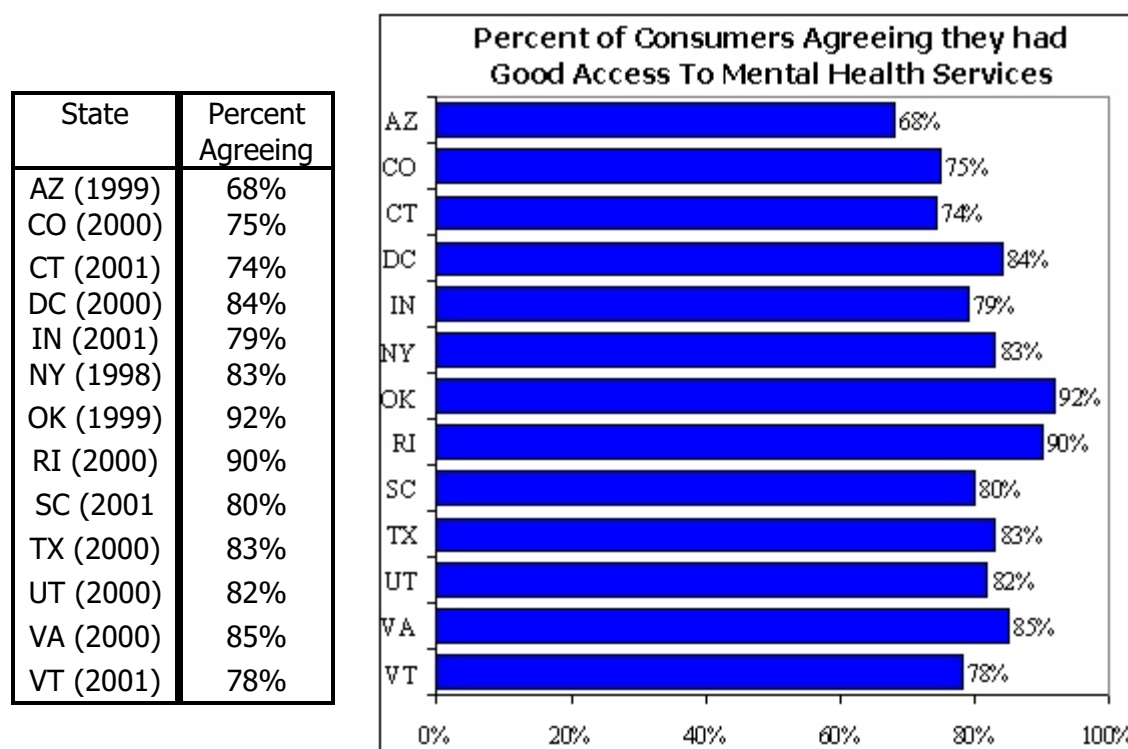
1. Recode ratings of "not applicable" as missing values.
2. Exclude respondents with more than 1/3rd of the items missing.
3. Calculate the mean of the items for each respondent.
4. Calculate the percent of scores less than 2.5. (percent agree and strongly agree).

Numerator: Total number of respondents with an average scale score < 2.5.

Denominator: Total number of respondents. (Please note that the results of the consumer survey may differ from those published by individual states because the common computational methodology for this study may be different from what individual states use. Individual states may also use different items in their calculations.)

CURRENT IMPLEMENTATION STATUS: Many of the states participating in the 16-State Study are implementing a version of the MHSIP Consumer Survey. Thirteen of the states submitted consumer survey data needed to calculate this indicator. Results in the states ranged from a low of 68% agreeing they had good access, to a high of 92%.

There did not appear to be any systematic significant differences by age, gender or ethnicity on perception of access. These data are available in greater detail in the workgroup report on the consumer survey.



SOURCES OF INFORMATION: Consumer Survey: recommended measure: MHSIP Consumer Survey – short or long versions.

POPULATIONS:

- | | |
|--|--|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input checked="" type="checkbox"/> All Adults |
| | <input checked="" type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|---|--|
| <input type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|---|--|

ISSUES: The major issue related to these data are that they are not comparable. The populations covered, the sampling methodologies used and the administration of the survey varied considerably across states. As the workgroup report indicates, some states reported on Medicaid consumers, others used one site. Even though most used a statewide sample, in some states staff handed out the survey, others had drop boxes while others had more rigorous methodologies. Sampling methodologies were also diverse, many states using convenience samples. This diversity results in the inability to have useful benchmarks on perception of access across states.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Judy Hall (Washington)

INDICATOR: A2-C CHILDREN AND ADOLESCENT PERCEPTION OF ACCESS

RATIONALE FOR USE: While the MHSIP consumer survey was developed with a general population receiving services as respondents, many of the special concerns related to children's and family members' perspectives were not addressed. This resulted in an initiative sponsored by the 16-State Study to develop an appropriate perception of care survey for children's services.

APPROACH TO MEASURE: The Children's Indicators Workgroup recognized the need to develop and test a MHSIP-like consumer survey focused on the special treatment and life needs of children and adolescents. Ultimately, the workgroup designed two different surveys, one to be completed by adolescents and a second version to be completed by the parents of younger children. Building on the experiences of the developers of the adult MHSIP consumer survey and the instruments used in the CMHS Comprehensive Community Mental Health Service for Children and their Families Program, the workgroup identified 26 items scored on a five-point, Likert-type scale for inclusion in the surveys. These items were designed to measure the domains of access, appropriateness, outcomes, and satisfaction. For this population "appropriateness" included family involvement and cultural sensitivity. In addition, there were several items that assessed specific behavioral outcomes (e.g., out-of-home placement).

- **Developed the Youth Services Survey (YSS) and its counterpart, the Youth Services Survey for Families (YSS-F).** These surveys were designed to provide a means of collecting standardized information on domains similar to those measured by the MHSIP Consumer Survey but focusing on issues more relevant to children and their families. The YSS can be completed by youth age 13 years and older. Caregivers of the child consumer complete the YSS-F.
- **Conducted a survey to determine states' interest and ability to collect additional outcome information.** This information is needed for recommended indicators on school attendance, out of home placement, and juvenile justice involvement.
- **Developed recommendations and guidelines for states to use in collecting and reporting performance indicators for children's mental health.** "Guidelines for the YSS and YSS-F" can be found at <http://www.mhsip.org/surveylink.htm>.

Five states participated in the initial survey effort. Factor analyses resulted in five factors: Satisfaction, Outcomes, Cultural Sensitivity, Family Involvement in Treatment, and Access.

A more detailed description related to the development of the children's surveys (one for the child/adolescents' perspectives, the other for the family members' perspective) is provided in the workgroup report.

MEASURE(S): The important aspect is to obtain the consumers' perspective on the impact of the services received through a confidential, self-report mechanism. A consumer survey for the families of children and/or for adolescents to complete themselves is recommended.

The expectation is that an annual, cross-sectional survey of consumers be conducted that includes an assessment of consumers' perception of the outcome of services. It is recommended that the Youth Services Survey be used for adolescents over the age of 13, and the Youth Services Survey

for Families (YSS-F) be used for younger children. If one of the YSS surveys are used, perception of the access to services will be measured by responses to the following items:

Good Access to Service:

- The location of services was convenient for us.
- Services were available at times that were convenient for us.

Scoring:

1. Exclude respondents with two or more missing values.
2. Calculate the mean of the items for each respondent.
3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree).

Numerator: Total number of respondents with an average scale score > 3.5.

Denominator: Total number of respondents.

CURRENT IMPLEMENTATION STATUS: By the end of the project's reporting period, 10 of the 14 state mental health agencies that served youth had implemented at least one of the surveys. Seven states surveyed both caregivers and youth, two states collected the YSS-F only, and one state collected only the YSS. The majority of states used a sample that was representative at the state level. Overall results are presented below. In addition to the states participating in the 16-State Study, the YSS and YSS-F have been used in at least four other states to assess consumer perceptions of their public mental health services. One of the additional states, Kentucky, contributed its data to the project. Indiana and Washington completed using the surveys too late for their data to be included in the analysis.

Table 1. Performance Indicators Based on Family Surveys

	YSS		YSS-F	
	N	Percent	N	Percent
Good Access to Services	225	68.0	1,542	73.8
Participation in Treatment	574	58.0	1,539	72.8
Cultural Sensitivity of Staff	226	77.9	1,539	82.3
Satisfaction with Services	225	65.3	1,541	64.1
Positive Outcome of Service	582	56.7	1,538	45.6

Reliability analysis. The items in each scale were analyzed for internal consistency using Cronbach's alpha. Separate analyses were conducted for the YSS and the YSSF. Results are displayed in Table 2. For all factors with more than two items, the alpha would be reduced if any item were deleted.

Table 2. Cronbach's alpha for Family Surveys

Scales	YSS		YSSF	
	N	Alpha	N	Alpha
Access to Services	222	.694	1,516	.725
Participation in Treatment	218	.856	1,500	.772
Cultural Sensitivity of Staff	222	.895	1,452	.907
Satisfaction with Services	204	.944	1,344	.943
Perceived Outcome of Service	218	.892	1,429	.905

STUDY RESULTS: Table 3 below, shows results from the pilot survey for both the youth self-report survey and the parent survey. Caution should be given to interpreting these pilot study results, due to the small numbers of respondents in many consumer characteristics. CO, KY, OK, TX, VT, and

VA all participated in the pilot study. In addition to the pilot states, DC, IN, NY, UT, and WA all have completed collection of data using either the YSS-F or YSS surveys. The data from these 5 additional states are not included in Table 3 below.

Table 3: 16 State Study Pilot: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F) Results: Perception of Access:									
Demographic Breakdown	YSS		YSS-F		Youth Characteristics ³	YSS		YSS-F	
	N	Percent ²	N	Percent ²		N	Percent ²	N	Percent ²
TOTAL	225	68.0%	1,542	73.8%					
Gender					Court involved last 6 months				
Male	105	67.0%	971	73.9%	Yes	49	71.4%	214	70.1%
Female	117	68.1%	533	74.3%	No	176	66.5%	1,286	74.6%
Unknown	7	83.3%	38	63.2%	Unknown	4		42	69.0%
Race					Absent from school last month				
American Indian/Alaskan Native	15	46.7%	35	71.4%	Yes	104	70.2%	446	72.6%
White	115	69.6%	964	74.2%	No	93	68.1%	509	79.4%
Black	36	79.4%	342	73.1%	Unknown	32	60.0%	587	69.8%
Asian/Pacific Islander	---	---	2	0.0%	On psychotropic meds				
Other	50	64.0%	165	73.9%	Yes	121	69.7%	1,014	74.7%
Unknown	12	60.0%	34	70.6%	No	103	65.7%	494	72.5%
Hispanic ³					Unknown	5		34	67.6%
Yes	68	61.8%	167	73.7%	Currently in service				
No	146	71.0%	1287	74.1%	Yes	125	75.6%	1,102	78.0%
Unknown	15	66.7%	88	69.3%	No	96	56.8%	376	62.2%
Age					Unknown	8	85.7%	64	68.8%
0 - 3	---	---	7	71.4%	Currently living at home				
4 - 12	17	68.8%	903	74.1%	Yes	170	66.5%	1,400	74.6%
13 - 17	173	66.3%	548	73.9%	No	52	71.2%	102	63.7%
18 and older	9	66.7%	35	74.3%	Unknown	7	83.3%	40	70.0%
Unknown	30	78.6%	49	67.3%					
Medicaid									
Yes	126	71.2%	1092	73.4%					
No	86	65.9%	397	74.8%					
Unknown	17	53.3%	53	73.6%					

¹ Good access to services defined as average score on questions 15 & 16 > 3.5. Cases with two missing values excluded.

² Percent of respondents in each category who met criteria for this indicator.

³ Data element not collected by VT, therefore, VT cases excluded from analysis of the Hispanic variable and all Youth Characteristics.

SOURCE/S OF INFORMATION: Consumer Survey: recommended measure: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F).

POPULATIONS:

- ☒ Children with a Serious Emotional Disturbance ☒ All Children
☐ Adults w/ a Serious Mental Illness ☐ All Adults ☐ Geriatric

SETTINGS:

- ☐ Psychiatric Inpatient Settings ☒ Community-based Settings

ISSUES: Two surveys (YSS and YSS-F) have been developed to assess perceptions of the quality of mental health services provided to youth. These surveys can be found at <http://www.mhsip.org/surveylink.htm>. Data obtained through the 16-State Study indicates that the surveys reliably measure constructs of access to services, participation in treatment, cultural sensitivity of staff, satisfaction with services, and outcomes. In addition, several other items on the surveys will facilitate the evaluation of mental health services on other important indicators of performance.

While this project has made great strides toward specifying and standardizing some critical performance measures for children's mental health services, the workgroup hopes to continue working to expand our knowledge and improve the tools to measure performance in this area. Future efforts will compare telephone survey vs. mail survey methodologies, evaluate the usefulness of these indicators in evaluating performance over time, and examine the effects of risk adjustment on the children's performance indicators.

To assure comparability among survey results, not only must similar surveys be used, but the populations covered, the sampling methodologies used and the administration of the survey should also be comparable across states.

The Workgroup also explored the addition of new questions to the YSS and YSS-F to provide information needed for other child and adolescent indicators in the NASMHPD Framework. The proposed YSS and YSS-F include additional questions needed to calculate indicators related to "links to physical health services," "out-of-home placements," "percentage of youth living in family like settings," and "use of therapeutic foster care services."

Finally, efforts are being made to collaborate with developers of the ECHO surveys. This workgroup has a commitment to reach a consensus on a single instrument or set of items that can be used to evaluate mental health services in both the private and public sectors.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Molly Brunk and Randy Koch (Virginia)

INDICATOR: Q1 PERCENTAGE OF CONSUMERS THAT ACTIVELY PARTICIPATE IN DECISION MAKING REGARDING TREATMENT. (From MHSIP Consumer Survey)

RATIONALE FOR USE: Participation by consumers (and family members for children) in decisions regarding treatment fosters a collaborative, trusting relationship and supports the consumer's (or family member's) ability to make decisions and act responsibly. Both for health and mental health services, research indicates that such involvement is correlated with positive outcomes. A separate indicator (Q11) was also tested that looks at family participation for children.

APPROACH TO MEASURE: The important aspect is to obtain information from the consumer regarding both active involvement in treatment decision-making and definition of treatment goals. This should be a consumer self-report measure and assess whether the desires of the consumer are considered in treatment planning.

Survey results were for adults (age 18 and older) and did not include persons with single diagnosis substance abuse. However, some states, by nature of their mandate included only persons with serious mental illness while others included a broader population. Comparisons across states without taking into account such differences are therefore questionable.

MEASURE(S): The workgroup recommends that this indicator be calculated using information collected directly from consumers and their families. From the MHSIP Report Card Consumer Survey, responses to the following items will be combined to create this measure:

Measure: MHSIP Consumer Survey: Perception of Participation in Treatment Planning

- I, not staff, decided my treatment goals
- I felt comfortable asking questions about my treatment and medication

Scoring:

- A. Recode ratings of "not applicable" as missing values.
- B. Exclude respondents with more than 1/3rd of the items missing.
- C. Calculate the mean of the items for each respondent.
- D. Calculate the percent of scores less than 2.5. (percent agree and strongly agree).

Numerator: Total number of "agree" or "strongly agree" responses (i.e., number of items marked agree or strongly agree across all respondents).

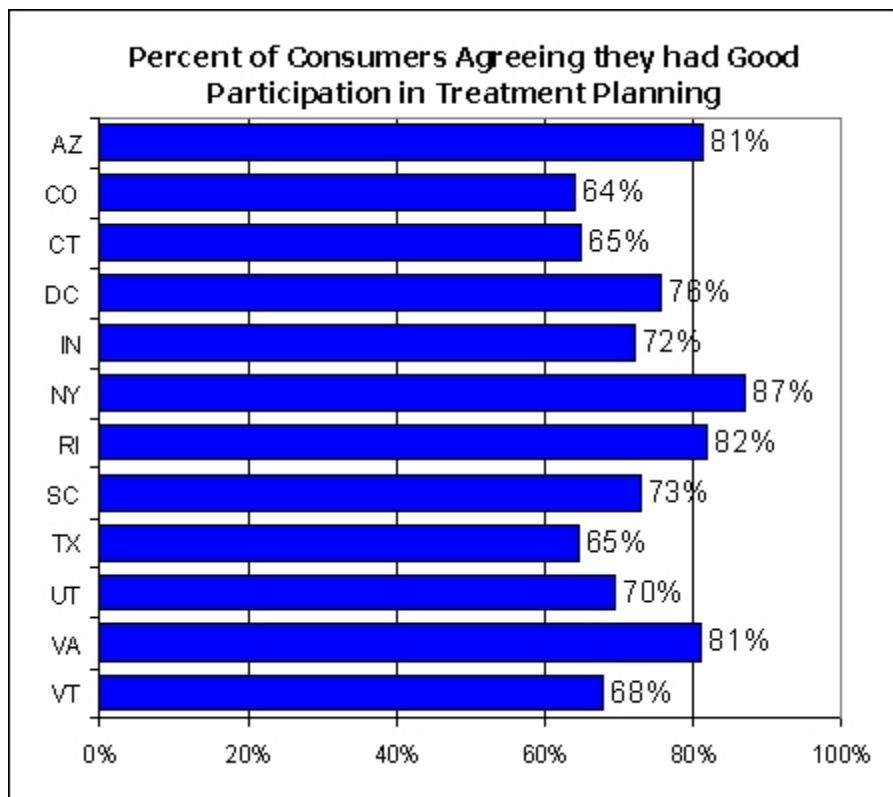
Denominator: Total number of possible responses (i.e., number of respondents x 2 items) minus the number of missing values. (Please note that the results of the consumer survey may differ from those published by individual states because the common computational methodology for this study may be different from what individual states use. Individual states may also use different items in their calculations.)

CURRENT IMPLEMENTATION STATUS: Many of the states participating in the 16-State Study are implementing a version of the MHSIP Consumer Survey. Twelve of the states submitted consumer survey data needed to calculate this indicator. Results in the states ranged from a low of 64% agreeing they were included in treatment planning, to a high of 87%.

There did not appear to be any systematic significant differences by age, gender or ethnicity on perception of access. These data are available in greater detail in the workgroup report on the consumer survey. One state's data (UT) was derived from a differently worded set of questions.

STUDY RESULTS:

State	Percent Agreeing
AZ (1999)	81%
CO (2000)	64%
CT (2001)	65%
DC (2000)	76%
IN (2001)	72%
NY (1998)	87%
RI (2000)	82%
SC (2001)	73%
TX (2000)	65%
UT (2000)	70%
VA (2000)	81%
VT (2001)	68%



SOURCE/S OF INFORMATION: Consumer Survey: recommended measure: MHSIP Consumer Survey -- short or long versions.

POPULATIONS:

- | | |
|--|--|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input checked="" type="checkbox"/> All Adults |
| | <input checked="" type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|---|--|
| <input type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|---|--|

ISSUES:

- The items in the MHSIP report card are indirect measures of involvement or participation in treatment planning.
- Some consumers (especially in state psychiatric hospitals) may choose to not participate in treatment planning.
- Consumer Survey data are still not comparable. The populations covered, the sampling methodologies used and the administration of the survey varied considerably across states. As the workgroup report indicates, some states reported on Medicaid consumers, others used one site. Even though most used a statewide sample, in some states staff handed out the survey, others had drop boxes while others had more rigorous methodologies. Sampling

methodologies were also diverse, many states using convenience samples. This diversity results in the inability to have useful benchmarks on perception of access across states.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Judy Hall (Washington)

INDICATOR: Q2 PERCENTAGE OF CONSUMERS LINKED TO PHYSICAL HEALTH SERVICES

RATIONALE FOR USE: The goal of the indicator is to determine whether the person receiving mental health services have had a face-to-face contact with a nurse or doctor (not just whether they have had access to medical care).

The use of the physical health indicator is important for several reasons. Firstly, persons with mental illnesses have relatively poor access to general healthcare. This often compounds mental health issues and makes recovery difficult. In addition, persons with serious mental illnesses are under served in medical care systems and have higher mortality rates due to medical causes. Finally, the recent Surgeon General's Report on Mental Health highlighted the need to recognize the connection between physical and mental health. This connection emphasizes the importance of examining the individual holistically, rather than focusing exclusively on either mental or physical health. Thus, given the aforementioned reasons, it is important to determine whether persons receiving mental health services are simultaneously accessing physical health services.

APPROACH TO MEASURE: The measure could be obtained from administrative management information systems (MIS) or from consumer self-reports. The 16-State Study Workgroup on this indicator recommended the following two survey questions to be added to consumer surveys: (1) In the last year, did you see a doctor or nurse in a hospital emergency room?; and (2) In the last year, other than going to a hospital emergency room, did you see a doctor or a nurse for a check-up, physical exam, or because you were sick?). Some states were able to add these questions to their surveys, while other states relied on either similar questions or preexisting Medicaid MIS data. The result is that some of the questions across states are comparable, while others are not. In addition, some information was collected via self-report, while other was reported through preexisting MIS data. Therefore, MIS data questions were often not directly comparable with those developed by the Physical Health Workgroup. Finally, many states reported 2000 data, while only two reported 2001 data. Several states used differential methodology, making comparability difficult.

MEASURE(S): The questions added to the MHSIP Consumer Survey for this indicator were:

- 1 **Emergency-** In the last year, did you see a doctor or nurse in a hospital emergency room?
- 2 **Non-Emergency-** In the last year, other than going to a hospital emergency room, did you see a doctor or a nurse for a check-up, physical exam, or because you were sick?

Numerator: Total number of respondents answering "Yes" to each item. The first question in a clarifier for the consumer, the second is used for the reported performance measure.

Denominator: Total number of respondents.

CURRENT IMPLEMENTATION RESULTS: Number of states that responded: Six states sent data; Seven additional states noted they could collect data for FY2002.

The following table reports information collected on differential questions related to physical health across six states (VT, TX, RI, CT, DC, CO). The table provides information on questions surveyed

and the percent of individuals per state responding affirmatively to these questions. Since this data was collected as a pilot, and the questions asked varied, individual state data is not identified.

Several additional states have committed to collecting physical health data for FY2002. Arizona and South Carolina (78% linked to physical health services) have completed MHSIP surveys using these questions for FY2001 data.

FY2000 and 2001 Indicator Q2: Percentage of Consumers Linked to Physical Health Services

Physical Health Questions	State #1: % Yes	State #2: % Yes	State #3: % Yes	State #4: % Yes/ Agree	State #5: % Yes	State #6 % Yes
(A) In the last year, did you see a doctor or nurse for a health check-up or because you were sick?	81.4% (01)					61%
(A) Have you had a 'complete' physical exam in the past 12 months? (including annual screening tests #3)	70.1% (01)	69.7% (00)	76.9% (00) 79.3% (01)			
(A) In the last year, did you see a dentist or dental hygienist for a check-up or cleaning?	57.4%					
(A) In the last year, did you see a dentist because you had a dental problem?	68.8%					
(A) Is there a physical health provider that you usually use when you have a physical health problem?		83.6%	92.5% (00) 94.6% (01)			
(A) How would you describe your general physical health (compared to other people your age #1)? (%Good to Excellent)	61.0%		56.9% (00) 56.6% (01)			
(Y) In the last year did your child see a medical doctor/nurse?				79.6%		
(A) I was able to get care for my health problems. (5 pt. Likert scale agree/disagree)				81%		
(A) Contact with a physician during the previous year. [Medicaid claims database.]					54% (00) 64% (01)	
(A) In the last year, did you see a doctor or nurse in a hospital emergency room? *		44.3%				
(A) In the last year, other than going to a hospital emergency room, did you see a nurse or a doctor for a check-up, physical exam, or because you were sick? *		79.8%				

* = Physical Health Workgroup Questions; A = Adult, Y = Youth

States Reporting: VT, TX, RI, CT, DC, CO (Order does not correspond to #1-6 in the table above)

STUDY RESULTS:

Medicaid: The Physical Health Workgroup received Medicaid data from two states (Vermont and Colorado). Items extracted from Medicaid MIS data included: (1) whether or not individuals visited a doctor during a given fiscal year; and (2) whether or not physical claims for non-mental health services were recorded. Results varied across states.

In Vermont, for instance, 64% of those under age 65 visited a doctor during the FY2000, with women being more likely to access primary health care services than men (70% vs. 57%). This analysis included individuals less than 65 years of age with Medicaid, but not Medicare coverage. The population included 74% of children services consumers, 52% of consumers served by community programs for adults with severe and persistent mental illness (SPMI), and 49% of all adults served by other community mental health programs.

Alternately, Colorado Medicaid data indicated that 22% of females and 29% of males had visited a doctor's office at least once during FY99/00. In addition, 65% of females and 62% of males sampled had at least one physical claim documenting that they received non-mental health services during the same fiscal year. The population sampled included individuals ages 0 to 65+ with Medicaid coverage. All individuals sampled were diagnosed as SED (serious emotional disturbance) or SMI (serious mental illness).

As demonstrated by this anecdotal reporting, comparability of indicators is extremely difficult. Although Vermont and Colorado both reported on Medicaid consumers, the samples differed in terms of age range, severity of mental illness, and fiscal year.

Youth Services Survey and Youth Services Survey For Families: Due to the small sample size and the nature of the pilot study, data from the Youth Services Survey and the Youth Services Survey for Families were not reported by the Child and Family Workgroup. The Youth Services Survey for Families included the following item: In the last year, did your child see a medical doctor (or nurse) for a health checkup or because he/she was sick? Across the four states sampled (Colorado, Oklahoma, Texas, and Virginia), 79.6% of those surveyed reported that their child saw a medical doctor (or nurse) within FY2000. The population sampled included families with a youth aged 0-18. In addition, it included youth through age 22 who were enrolled in special education programs and receiving services from child and adolescent mental health programs. Families surveyed included both Medicaid and Non-Medicaid populations. These pilot data provide some indication of linkages between primary care and mental health services. The goal is to complete revisions on the two surveys, and pilot the revised items during FY2002.

SOURCES OF INFORMATION: Consumer Survey: recommended measure: MHSIP Consumer Survey – short or long versions and from the Youth Services Survey and Youth Services Survey for Families for children and adolescents.

POPULATIONS:

Adult and youth who meet the following criteria: (1) accessed mental health services during a given year; (2) were surveyed during a specified time period; and (3) had face-to-face contact with a doctor or nurse during that year.

- | | | |
|---|----------------|-------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children | |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults | ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|----------------------------|
| ■ Psychiatric Inpatient Settings | ■ Community-based Settings |
|----------------------------------|----------------------------|

ISSUES: The data were not comparable across states due to the fact that some states added the items to their MHSIP Consumer Surveys, while others relied on preexisting questions in their MIS databases. Data from the states warrant further investigation.

LESSONS LEARNED:

- It is difficult to capture the information objectively on the entire population served. For instance, some states were only able to collect Medicaid data, while others incorporated the items into their MHSIP and Youth and Family consumer surveys.
- The method of choice selected by the Workgroup incorporates the two items into preexisting consumer surveys. It appears that this method can be implemented efficiently, with little burden on mental health systems.

RECOMMENDATIONS

- The process can be streamlined if states include the two Physical Health Workgroup items into their MHSIP and Youth and Family consumer surveys. States would then have an efficient means of collecting this important information.

- Persons receiving mental health services are under served in medical care systems, have higher mortality rates due to medical causes, and experience additional difficulties in recovery when co-occurring physical illnesses exist. Therefore, the physical health variable is clearly important, and warrants further consideration.
- Research has indicated that Latino and Asian American populations tend to access mental health services through initial contact with primary care. Therefore, the physical health services indicator may provide important information on population trends and service provision.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Debra Kupfer (Colorado)

INDICATOR: Q3 CONSUMERS ARE CONTACTED BY COMMUNITY PROVIDERS WITHIN 7 DAYS OF DISCHARGE FROM A STATE HOSPITAL

RATIONALE FOR USE: Continuity of care from hospitals to community providers is an important part of the recovery process. It helps avoid the recurrence of symptoms and thus readmission to state hospitals. To monitor continuity of care, this indicator measures the rate of consumers contacted by community providers after discharge from state hospitals.

APPROACH TO MEASURE: The important aspect of this measure is to monitor continuity of care in the period following a hospital discharge. Some systems may not be able to obtain follow-up information from all community providers. If this is the case, the measure should focus on follow-up among a pre-defined subset of providers.

MEASURE(S): Contacts should be a face-to-face contact occurring in a consumer's home, school, place of employment, or clinic between a consumer and a psychiatrist, other mental health professional, or case manager; no forensic/drug/alcohol or domestic violence contacts should be included.

Numerator: Total number of persons discharged from any acute care or long-term care psychiatric hospital or psychiatric units of an acute care hospital that is state-operated or contracted that report client data to the state mental health authority who received at least one non-emergency outpatient visit within seven days of their discharge.

Denominator: Total number of persons discharged from any acute care or long-term care psychiatric unit of an acute care hospital that is state-operated or contracted and that report client data to the state mental health authority.

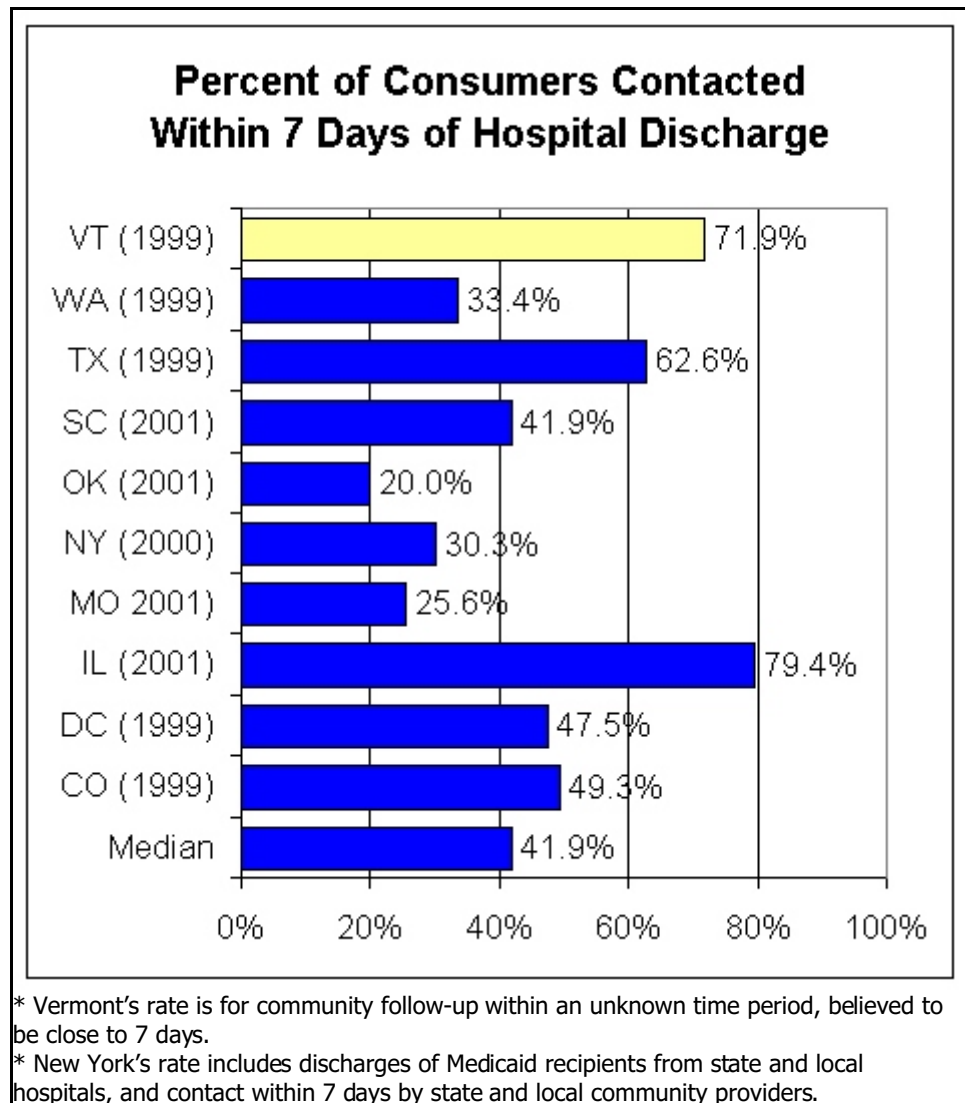
- Outpatient service is a contact with a Community Mental Health Center (CMHCs) only. The number should only be based on those persons who are referred to a CMHC.
- Contact with a CMHC should be face-to-face, occurring in a consumer's home, school, place of employment, or clinic, between a consumer and a psychiatrist, other mental health professional, or case manager. No forensic/drug/alcohol or domestic violence contacts should be included. The contact following discharge should be non-emergency only.
- The numerator should be calculated separately for children/adolescents (up to age 17) and adults (age 18 and above).
- The denominator should be calculated separately for children/adolescents (up to age 17) and adults (age 18+).
- Inpatient hospitalization is at a state-operated hospital from which only planned discharges are included, no leave releases, AWOLs, or transfers should be included. If a person is "discharged from pass," then the date of the discharge should then be the first date of the pass.
- Discharge is an event. All discharges are counted. A person with multiple discharges should have each discharge counted.

Data Note: No mechanism was devised to track persons who refuse public services, such as those who choose to receive private services only.

CURRENT IMPLEMENTATION STATUS: Ten states were able to report on this indicator. Six states (Colorado, District of Columbia, Oklahoma, South Carolina, Vermont, and Washington) provided data for FY1999, seven states (Colorado, District of Columbia, New York, Oklahoma, South Carolina, Texas, and Vermont) provided data for FY2000, and four states (Missouri, Illinois, Oklahoma and South Carolina) provided data for FY2001. Three other states (Arizona, Indiana, and Virginia) are working on gathering data for this indicator. Three states (Connecticut, Rhode Island, and Utah) are not currently able to collect and report data for this indicator. Connecticut is close to implementing and will be able to report on this indicator in the near future.

STUDY RESULTS:

States used a variety of methods to calculate community follow-ups, and consequently, reported results vary widely. The median 7 day follow-up rate was 41.9%, with variations from 20% to 79.4%. Adults with major mental illnesses were more likely to have community follow-up than were adults with other diagnoses. Adults in general, were more likely to have community follow-up within 7 days than were children or adolescents. Vermont's data was not included in the calculation of median rates because it does not include dates for individual discharges, though they believe that most are seen within 7 days.



Experience of the 16-State Study in Producing the Indicator: There were seven areas in which the comparability of the data is questionable:

- Two states that provided data were only able to report totals and not breakouts.

- The New York measure includes discharges of Medicaid recipients from state and local hospitals, and contact within 7 days by state and local community providers;
- All but one state reported breakout data that followed the same categories for age and sex breakouts. The state that did not report standardized breakout data grouped ages 0-12 as one category and provided only data for white/non-white in the race category.
- The states that reported data for the breakouts also provided data for diagnostic categories.
- Some states reported data for the homeless category and demographic categories.
- All but one state reported data for the 0-7 day time period. States were allowed to report data for other time periods for comparison, but these time periods varied among the states. Vermont was unable to determine the amount of time from discharge to contact by a CMHC.
- Vermont's data does not include dates for individual discharges, but they believe that most are seen within 7 days.

Contacted by Community Providers within 7 Days of Discharge from a State Hospital				
	Number of States	Median	Low Score	High Score
Total	10	41.9%	20.0%	79.4%
Age Group				
Children (0-12)	8	34.8%	9.6%	92.0%
Adolescents (13-17)	8	33.5%	21.4%	89.8%
Adult (18 and up)	8	50.9%	8.9%	79.1%
Gender				
Female	8	44.5%	22.2%	81.8%
Male	8	43.9%	18.3%	78.0%
Race/Ethnicity				
Black	7	42.2%	16.9%	73.4%
White	7	41.8%	20.9%	82.3%
Native American	4	19.1%	12.8%	27.3%
Asian/Pacific Islander	6	36.2%	21.7%	88.2%
Hispanic	7	45.2%	20.5%	83.6%
Diagnosis				
Adults w/SM	7	49.0%	23.4%	80.6%
Other Adults	7	35.7%	14.6%	76.6%
Children w/SM	7	38.4%	7.9%	83.6%
Other Children	7	38.6%	10.8%	92.7%

SOURCE/S OF INFORMATION: MIS

POPULATIONS:

- Children with a Serious Emotional Disturbance
- Adults w/ a Serious Mental Illness
- All Children
- All Adults
- Geriatric

SETTINGS:

- ☐ Psychiatric Inpatient Settings
- ☒ Community-based Settings

ISSUES: Five issues arose during data gathering.

- **When counting starts:** Several states had concerns about when the counting started when a person was discharged and what constituted a discharge. One state was concerned about how to count consumers discharged from a pass. It was decided that if a person is discharged from a pass, then the date of the discharge is the first date of the pass.
- **Types of services that count as contact with a CMHC:** There was concern about the types of services that would count as a contact with a CMHC. One state reported that some consumers went directly to some type of residential setting where they received CMHC services and there was a concern as to whether this type of contact should be included. It was decided that in the case where a consumer is discharge directly to some type of residential setting, this would be counted as a contact with a CMHC.
- **Contacts on first day of discharge at the inpatient facility:** There was concern about the persons who received their first CMHC visit on the day of discharge and whether or not this would count as a contact. It was decided that any pre-discharge treatment or service provided at the inpatient facility is not counted as a contact within 7 days of discharge. Thus, for a contact to count, it must occur outside the inpatient facility from which the person is discharged.
- **Missing data:** There was concern about how to deal with missing data. It was unclear whether the missing data indicated no contact with the CMHC or that the record of the contact was missing. In the case of one state, records were discovered that there were persons discharged from an inpatient facility who had no contact with a CMHC. These cases contained explanations for the lack of contact. The issue of how to count these cases is unresolved.
- **Lower rates for children than adults:** Most of the states that reported data had lower rates for children than adults. In the cases where children hospitalized in state operated hospitals receive contacts with CMHCs after discharge that are paid by Medicaid, these persons are counted in the denominator while the contacts are not counted in the numerator.

Lessons Learned and Recommendations for the Future:

This indicator was difficult for the states to report. Many of the states developed the capacity to collect this data during the period of the grant. Some states are only now capable of collecting the data. The workgroup recommended that developing the capacity to report this indicator be made a high priority by states without the capacity.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Ray Bottger (Oklahoma)

INDICATOR: Q4-A ADULT CONSUMER PERCEPTION OF THE QUALITY/ APPROPRIATENESS OF SERVICES

RATIONALE FOR USE: Research suggests that a positive therapeutic relationship results in positive outcomes. The sensitivity to and respect for the consumer, the collaborative connection between the consumer and the therapist, and the consumer's perception of the competence of staff and the quality of care are factors which will determine the consumer's willingness to remain in treatment.

APPROACH TO MEASURE: The consumers' perception of quality/appropriateness of service complements other measures in this domain by providing the unique perspective of the consumer receiving services. What was the consumers perspective regarding the quality of care?

The items comprising the quality/appropriateness domain in the MHSIP consumer survey were used to obtain a measure of the domain and are based on concerns related to this domain identified by consumers. These include: staff belief in recovery, staff sensitivity and respect and information received.

These items are part of a larger survey that is usually conducted on a sample of adults who received services during a specified time period. The methodology of administration has varied across states, where some persons have used mail surveys and others have used face-to-face surveys. (While some studies suggest that differences in response rates are not significant, others suggest that there may be systematic difference based on administration methodology.) Also the populations covered and the samples selected varied considerably across states.

Survey results were for adults (age 18 and older) and did not include persons with single diagnosis substance abuse. However, some states, by nature of their mandate included only persons with serious mental illness while others included a broader population. Comparisons across states without taking into account such differences are therefore questionable.

MEASURE(S): The items used to obtain the perception of quality/appropriateness are listed below:

1. My caregivers believed that I could grow, change and recover.
2. I felt free to complain.
3. Staff told me what side effects to watch for.
4. Staff respected my wishes about who is and is not to be given information about my treatment.
5. Staff were sensitive to my cultural/ethnic background.
6. Staff helped me obtain the information needed so I could take charge of managing my illness.

Scoring:

1. Recode ratings of "not applicable" as missing values.
2. Exclude respondents with more than 1/3rd of the items missing.
3. Calculate the mean of the items for each respondent.
4. Calculate the percent of scores less than 2.5. (percent agree and strongly agree).

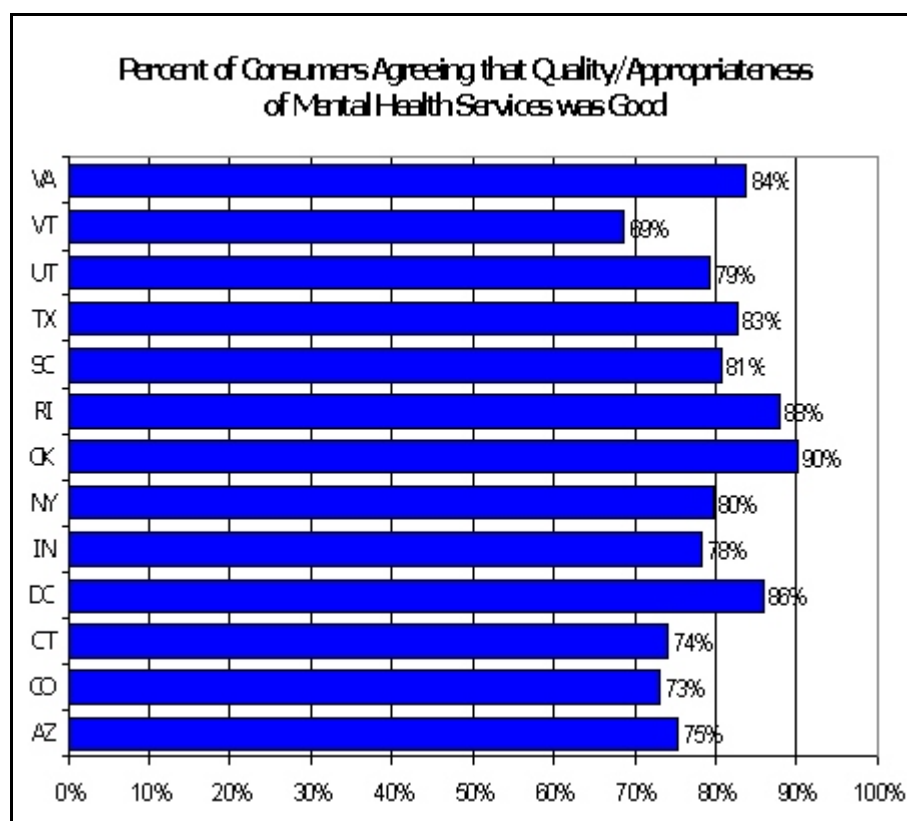
Numerator: Total number of respondents with an average scale score < 2.5.

Denominator: Total number of respondents. (Please note that the results of the consumer survey may differ from those published by individual states because the common computational methodology for this study may be different from what individual states use. Individual states may also use different items in their calculations.)

CURRENT IMPLEMENTATION STATUS: Many of the states participating in the 16-State Study are implementing a version of the MHSIP Consumer Survey. Thirteen of the 16 states administered the MHSIP consumer survey. Results are presented below.

STUDY RESULTS:

State	Percent Agreeing
AZ (1999)	75%
CO (2000)	73%
CT (2001)	74%
DC (2000)	86%
IN (2001)	78%
NY (1998)	80%
OK (1999)	90%
RI (2000)	88%
SC (2001)	72%
TX (2000)	83%
UT (2000)	79%
VA (2000)	84%
VT (2001)	79%



There did not appear to be any systematic significant differences by age, gender or ethnicity on perception of quality/appropriateness. These data are available in greater detail in the workgroup report on the consumer survey.

SOURCE/S OF INFORMATION: Consumer Survey: recommended measure: MHSIP Consumer Survey -- short or long versions.

POPULATIONS:

- | | |
|--|--|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input checked="" type="checkbox"/> All Adults |
| | <input checked="" type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|---|--|
| <input type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|---|--|

ISSUES: The major issue related to these data are that they are not comparable. The populations covered, the sampling methodologies used and the administration of the survey varied considerably across states. As the workgroup report indicates, some states reported on Medicaid consumers, others used one site. Even though most used a statewide sample, in some states staff handed out the survey, others had drop boxes while others had more rigorous methodologies. Sampling methodologies were also diverse, many states used convenience samples. This diversity results in the inability to have useful benchmarks on perception of access across states.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Judy Hall (Washington)

INDICATOR Q4-C PERCEPTION OF QUALITY/APPROPRIATENESS (SATISFACTION) FOR CHILDREN AND ADOLESCENTS

RATIONALE FOR USE: While the MHSIP consumer survey was developed with a general population receiving services as respondents, many of the special concerns related to children's and family members' perspectives were not addressed. This resulted in an initiative sponsored by the 16-State Study to develop an appropriate perception of care survey for children's services.

APPROACH TO MEASURE: The Children's Indicators Workgroup recognized the need to develop and test a MHSIP- like consumer survey focused on the special treatment and life needs of children and adolescents. Ultimately, the workgroup designed two different survey's one for to be completed by adolescents and a second version to be completed by the parents of younger children. Building on the experiences of the developers of the adult MHSIP consumer survey and the instruments used in the CMHS Comprehensive Community Mental Health Service for Children and their Families Program, the workgroup identified 26 items scored on a five-point, Likert-type scale for inclusion in the surveys. These items were designed to measure the domains of access, appropriateness, outcomes, and satisfaction. For this population "appropriateness" included family involvement and cultural sensitivity. In addition, there were several items that assessed specific behavioral outcomes (i.e. out-of-home placement).

- **Developed the Youth Services Survey (YSS) and its counterpart, the Youth Services Survey for Families (YSS-F).** These surveys were designed to provide a means of collecting standardized information on domains similar to those measured by the MHSIP Consumer Survey but focusing on issues more relevant to children and their families. The YSS can be completed by youth age 13 years and older. Caregivers of the child consumer complete the YSS-F.
- **Conducted a survey to determine states' interest and ability to collect additional outcome information.** This information is needed for recommended indicators on school attendance, out of home placement, and juvenile justice involvement.
- **Developed recommendations and guidelines for states to use in collecting and reporting performance indicators for children's mental health.** "Guidelines for the YSS and YSS-F" can be found at <http://www.mhsip.org/surveylink.htm>.

By the end of the project's reporting period, 10 of the 14 state mental health agencies that serve youth had implemented at least one of the surveys. Seven states surveyed both caregivers and youth, two states collected the YSS-F only, and one state collected only the YSS. The majority of states used a sample that was representative at the state level. In addition to the states participating in the 16-State Study the YSS and YSS-F have been used in at least four other states to assess consumer perceptions of their public mental health services. One of the additional states, Kentucky, contributed its data to the project.

Five states participated in the initial survey effort. Factor analyses resulted in five factors: Satisfaction, Outcomes, Cultural Sensitivity, Family Involvement in Treatment, and Access.

A more detailed description related to the development of the children's surveys (one for the child/adolescents' perspectives, the other for the family members' perspective) is provided in the workgroup report.

MEASURE(S): The important aspect is to obtain the consumer perspective on the impact of the services received through a confidential, self-report mechanism. A consumer survey for the families of children and/or for adolescents to complete themselves is recommended.

The expectation is that an annual, cross-sectional survey of consumers be conducted that includes an assessment of consumers' perception of the outcome of services. It is recommended that the Youth Services Survey be used for adolescents over the age of 13, and the Youth Services Survey for Families (YSS-F) be used for younger children. If one of the YSS surveys are used, perception of the access to services will be measured by responses to the following items:

Satisfaction with Services:

- Overall, I am satisfied with the services my child received
- The people helping my child stuck with us no matter what.
- I felt my child had someone to talk to when he/she was troubled.
- The services my child and/or family received were right for us.
- My family got the help we wanted for my child.
- My family got as much help as we needed for my child.

Scoring:

1. Exclude respondents with 4 or more missing values.
2. Calculate the mean of the items for each respondent.
3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree).

Numerator: Total number of respondents with an average scale score > 3.5.

Denominator: Total number of respondents.

CURRENT IMPLEMENTATION STATUS: By the end of the project's reporting period, 10 of the 14 state mental health agencies that served youth had implemented at least one of the surveys. Seven states surveyed both caregivers and youth, two states collected the YSS-F only, and one state collected only the YSS. The majority of states used a sample that was representative at the state level. Overall results are presented below.

Table 1. Performance Indicators Based on Family Surveys

	YSS		YSS-F	
	N	Percent	N	Percent
Good Access to Services	225	68.0	1,542	73.8
Participation in Treatment	574	58.0	1,539	72.8
Cultural Sensitivity of Staff	226	77.9	1,539	82.3
Satisfaction with Services	225	65.3	1,541	64.1
Positive Outcome of Service	582	56.7	1,538	45.6

STUDY RESULTS: Table 2 below, shows results from the pilot survey for both the youth self-report survey and the parent survey. Caution should be give to interpreting these pilot study results, due to the small numbers of respondents in many consumer characteristics. CO, KY, OK, TX, VT, and VA all participated in the pilot study. In addition to the pilot states, DC, IN, NY, UT, and WA all have completed collection of data using either the YSS-F or YSS surveys. The data from these 5 additional states are not included in Table 3 below.

16 State Study Pilot: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F) Results: Satisfaction with Services									
	YSS		YSS-F			YSS		YSS-F	
Demographic Breakdown	N	Percent ²	N	Percent ²	Youth Characteristics ³	N	Percent ²	N	Percent ²
TOTAL	225	65.3%	1,541	64.1%					
Gender					Court involved last 6 months				
Male	105	67.0%	969	62.2%	Yes	49	59.2%	215	63.7%
Female	117	63.8%	534	67.2%	No	176	66.5%	1,284	64.2%
Unknown	7	66.7%	38	68.4%	Unknown	4		42	64.3%
Race					Absent from school last month				
American Indian/Alaskan Native	15	40.0%	35	51.4%	Yes	104	62.5%	445	64.0%
White	115	64.3%	962	62.5%	No	93	69.2%	509	70.3%
Black	36	73.5%	343	67.6%	Unknown	32	63.3%	587	58.8%
Asian/Pacific Islander	---	---	2		On psychotropic meds				
Other	50	72.0%	165	70.3%	Yes	121	69.7%	1,015	64.5%
Unknown	12	60.0%	34	58.8%	No	103	59.8%	491	63.7%
Hispanic ³					Unknown	5		35	57.1%
Yes	68	66.2%	167	70.7%	Currently in service				
No	146	65.5%	1285	63.4%	Yes	125	75.6%	1,102	68.5%
Unknown	15	58.3%	89	61.8%	No	96	50.5%	375	51.7%
Age					Unknown	8	85.7%	64	60.9%
0 - 3	---	---	7	42.9%	Currently living at home				
4 - 12	17	62.5%	904	64.7%	Yes	170	67.1%	1,398	64.7%
13 - 17	173	66.3%	546	64.7%	No	52	57.7%	103	54.4%
18 and older	9	44.4%	35	65.7%	Unknown	7	83.3%	40	70.0%
Unknown	30	67.9%	49	49.0%					
Medicaid									
Yes	126	63.2%	1104	63.5%					
No	86	71.8%	397	63.7%					
Unknown	17	46.7%	53	79.2%					

¹ Satisfaction with services defined as average score on questions 1, 10, 11, 14, 18, 19 > 3.5. Cases with 4 or more missing values excluded.

² Percent of respondents in each category who met criteria for this indicator.

³ Data element not collected by VT, therefore, VT cases excluded from analysis of the Hispanic variable and all Youth Characteristics.

SOURCE/S OF INFORMATION: Consumer Survey: recommended measure: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F).

POPULATIONS:

- ☒ Children with a Serious Emotional Disturbance
 ☒ All Children
☐ Adults w/ a Serious Mental Illness
 ☐ All Adults
 ☐ Geriatric

SETTINGS:

- ☐ Psychiatric Inpatient Settings
 ☒ Community-based Settings

ISSUES: Two surveys (YSS and YSS-F) have been developed to assess perceptions of the quality of mental health services provided to youth. These surveys can be found at <http://www.mhsip.org/surveylink.htm>. Data obtained through the 16-State Study indicates that the surveys reliably measure constructs of access to services, participation in treatment, cultural sensitivity of staff, satisfaction with services, and outcomes. In addition, several other items on the surveys will facilitate the evaluation of mental health services on other important indicators of performance.

While this project has made great strides towards specifying and standardizing some critical performance measures for children's mental health services, the workgroup hopes to continue working to expand our knowledge and improve the tools to measure performance in this area. Future efforts will compare telephone survey vs. mail survey methodologies, evaluate the usefulness of these indicators in evaluating performance over time, and examine the effects of risk adjustment on the children's performance indicators.

To assure comparability among survey results, not only must similar surveys be used, but the populations covered, the sampling methodologies used and the administration of the survey should also be comparable across states.

The Workgroup also explored the addition of new questions to the YSS and YSS-F to provide information needed for other child and adolescent indicators in the NASMHPD Framework. The proposed YSS and YSS-F include additional questions needed to calculate indicators related to “links to physical health services”, “Out-of-home placements”, “percentage of youth living in family like settings”, and “use of therapeutic foster care services”.

Finally, efforts are being made to collaborate with developers of the ECHO surveys. This workgroup has a commitment to reach consensus on a single instrument or set of items that can be used to evaluate mental health services in both the private and public sectors.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Molly Brunk and Randy Koch (Virginia)

INDICATOR: Q5 PERCENTAGE OF ADULTS WITH A SERIOUS MENTAL ILLNESS RECEIVING ASSERTIVE COMMUNITY TREATMENT SERVICES

RATIONALE FOR USE: This an example of an innovative program model designed to meet the needs of persons who are seriously mentally ill. States are expected generally to plan for the development of such innovative programs as alternatives to inpatient services when warranted. The workgroup recognizes that not all states offer assertive community treatment programs, and that not all persons with serious mental illness necessarily need such services, however research has demonstrated the effectiveness of these services for many consumers.

Within the performance indicator project, ACT is classified as a quality indicator. However, ACT differs from many other quality indicators, in that it measures processes or services (i.e., what is being done for consumers) rather than the outcomes or results of those services. Outcome indicators focus on how consumers are doing (e.g., percent employed, percent hospitalized, satisfaction with aspects of treatment, level of functioning), process indicators assess what services are actually being received. ACT (and SE and Supported Housing) were selected as quality indicators because they were thought to represent consensus best practices for persons with severe and persistent mental illness (NASMHPD President's Task Force, 1998). That is, based on current research, persons with severe mental illness who receive ACT should have better outcomes than those receiving standard care.

APPROACH TO MEASURE: This measure – with the other exemplary services – is intended to reflect quality and appropriateness by monitoring the extent of the implementation of these services. Monitoring this measure in conjunction with inpatient penetration rates or for persons with a history of inpatient services could also prove useful. The use of ACT was a performance indicator tested by the Five-State Feasibility Study, which identified a major issue related to defining more exactly what are ACT services.

A critical issue for the 16-State Study was that states used different definitions of ACT. Moreover, there were no common procedures in place to insure comparability between states when reporting the indicator. To help further define and develop the ACT indicator, a series of pilot studies were undertaken (1) to survey the 16 states about the extent of ACT implementation in their state, (2) to identify the definitions of ACT used in the state, and (3) to develop simplified a checklist for ACT that could be used to verify that programs identified as ACT were comparable and adhered to expert guidelines.

MEASURE(S): The percentage of adult consumers with a diagnosis of schizophrenia or major mental disorders who received ACT services during the reporting year as a percentage of all consumers with a schizophrenia or major mental illness diagnosis. A critical element to this measure is the definition of what are ACT services to count in the numerator. The 16-State Study, through the work of John McGrew and others in Indiana led the work to pilot the development of an ACT checklist to assure fidelity of services reported as ACT.

Numerator: The number of consumers with severe mental illness receiving assertive community treatment. (Using a standardized definition of ACT, preferably measured for fidelity by a standardized instrument).

Denominator: Total number of persons served in the community 18 and older, with a serious mental illness (Unduplicated).

It is recommended that some standardized method be used for identifying consumers to be counted in the numerator. The 16-State Study Workgroup on ACT developed and tested an instrument to measure the fidelity of a program to ACT standards. The survey is attached below.

CURRENT IMPLEMENTATION RESULTS: The 16-State Study workgroup on ACT focused its work on developing a tool to assess the fidelity of programs to ACT standards and thus provide a comparable basis for reporting this indicator. As a result of this effort to develop a standardized tool, states were not asked to report indicator results for this developmental measure during the 16 State Report. Instead, the 16-State Study Workgroup developed a checklist for assessing the fidelity of ACT programs that can be used by future mental health performance indicator initiatives.

THE FIDELITY PROBLEM

The central charge of the performance indicators project with respect to the quality indicator of ACT is to determine the percent of persons with severe mental illnesses receiving the service. Before determining the number of individuals receiving a specific intervention, however, first we must verify that the intervention was actually delivered. Although this sounds simple (e.g., asking the providers if they provide ACT) it turns out that delivery of services self-labeled as ACT is not sufficient to achieve expected outcomes (McGrew, Bond, Dietzen, & Salyers, 1994). The labeled service must closely correspond to the model definition of ACT. Verifying this correspondence is the fidelity problem.

Fidelity refers to degree of adherence to an intervention model. In psychopharmacological interventions, problems in adherence generally refer to departures from specified frequency or dosing of a drug, but rarely involve questions about the ingredients or constituents of a drug. In the psychosocial arena, however, problems in fidelity more often focus on uncontrolled changes in the ingredients or constituents of the model as delivered, although adherence problems may include departures in dose and frequency. Thus, although 50 mg of Prozac dispensed in Montana, Illinois, or England, will likely contain identical proportions of the active (chemical) ingredients (within manufacturing tolerances), the same likely cannot be said about the active ingredients of ACT delivered in the same three locations.

Departures from fidelity can critically affect outcomes in psychosocial programs. For example, in a sample of 18 sites implementing ACT, McGrew and colleagues (1994) reported a correlation of .60 between overall measured ACT fidelity and percent reduction in hospital use. Subsequent investigations have verified that consumers in high-fidelity ACT programs experience better outcomes, i.e., greater relief from substance abuse and fewer hospital admissions (McHugo, Drake, Teague, and Xie, 1999). In the most recent published study of ACT and fidelity, Latimer (1999) confirmed the association between fidelity and client outcomes in a meta-analysis of 34 published studies of ACT.

Departures from fidelity typically result from either disagreement about the critical ingredients of a psychosocial model or inaccurate implementation of those ingredients. Thus, even when there is consensus concerning the critical ingredients of a model, as is arguably true for ACT (e.g., McGrew & Bond, 1995), there can be widespread variation in the implementation of the model (McGrew et al., 1994; McGrew and Bond, 1997). For example, in a study of 19 replications of the Threshold Bridge ACT model, McGrew and Bond (1997) reported dramatic between-site variations in 6-month average service contacts, with number of contacts ranging from a low of .7 contacts per week per enrolled client to a high of 5.6 contacts per week per enrolled client. Moreover, there is evidence that the degree of departure from the criterion model becomes progressively worse over time,

becoming greater in later program generations, i.e., those farther removed from the originating model (McGrew et al, 1994).

16 STATE SURVEY

Because currently there is no consensus accrediting body for ACT to provide, in effect, a clear definition, measuring the percent of consumers receiving ACT is problematic. Different states often use different definitions or different standards for ACT, making comparisons difficult. We designed a survey of the 16 states participating in the current performance indicator project to help determine the extent of the problem. The survey addressed two questions: (1) the extent of ACT dissemination in the states and (2) problems in defining and assessing implementation of ACT across the states. Ten states returned full data for ACT.

The results of the survey for ACT revealed that 9 of 10 states reported implementing ACT, 6 reported an operational definition of ACT, and 6 collected information on who received ACT, but only 2 states reported the information. In addition, just two states had detailed plans for how to measure ACT or to promote ACT implementation (e.g., auditing records, monitoring programs, providing a detailed treatment manual). Moreover, there was no common scale to assess ACT noted or reported. Finally, in at least one state there was some conceptual ambiguity in defining ACT, e.g., confusing ACT with case management.

Based on the results of the survey, three core issues/problems affecting comparability when collecting the ACT indicator were identified: definitional confusion (e.g., intensive case management vs. ACT), general broadening of the concepts (ACT defined as case management), and use of providers to collect and verify the data (no monitoring or training by state agency, lack of state-level auditing procedures). One clear issue for the performance indicator project, then, demonstrated by both the survey results and the fidelity literature, is the need to verify and measure implementation of ACT prior to concluding that services are actually being received. Although fidelity instruments exist for ACT (e.g., IF-ACT: McGrew et al., 1994; DACTS: Teague, Bond, & Drake, 1998), they tend to be fairly long and require a considerable investment of resources (on-site visits, staff interviews, auditing of client records, etc.). An alternate approach for purposes of the current project was to develop simplified checklists. Checklists were thought to be more consistent with the competing needs both to assess ACT implementation and to be sensitive to the service system demands of implementing the entire performance indicators package.

DEVELOPMENT OF ACT CHECKLIST

A checklist was developed for ACT, based on the fidelity instruments when available (reviewed above) and on literature specifying the critical ingredients (e.g., McGrew & Bond, 1995; McGrew et al., 1994; Allness & Knoedler, 1998). The checklist is one page and present a simple list of the critical ingredients. Each item is scored dichotomously, i.e., the item is rated as either fully met or not. The ACT checklist contains 31 items. The instrument development plan included the following steps: (1) to gather feedback on the preliminary checklists from ACT experts/providers to be incorporated into revised Pilot instruments, (2) to pilot the checklists in several of the 16 states, concurrently gathering criterion fidelity ratings using the DACTS for ACT (Teague, Bond, & Drake, 1998), (3) to modify the checklists, based on state-level, site-level and user-level feedback and on the results of the concurrent validity analyses, creating final checklists for use in the performance indicator project.

ACT RESULTS.

We collected data from 76 sites for the ACT checklist. Data was collected from five states: Connecticut (n=28), Indiana (n=30), Rhode Island (n=10), South Carolina (n=3), and Washington

DC (n=5). Forty-five sites also provided concurrent data from the DACTS fidelity scale. As mentioned above, states used different sampling strategies in selecting sites. Some states only sampled sites thought to be faithful to the ACT model (e.g., Rhode Island), whereas other states sampled a mix of ACT sites and more general case management teams to help provide more variability when testing the ability of the checklist to identify ACT programs (e.g, Indiana, Connecticut).

The primary purpose of the data collection was to validate a new brief checklist created to help in identifying ACT best practice sites. To validate the checklist, several states were asked to use both the novel checklist and known criterion fidelity measures to classify potential ACT sites. The results supported the validity of the novel checklist. The checklist exhibited a very good level of reliability as evidenced by internal consistency alpha coefficients. The checklist was then used to attempt to classify pre-identified criterion ACT sites. The ACT checklist correlated quite highly with its criterion fidelity scales and showed good ability to identify criterion-classified positive and negative sites, as evidenced by good sensitivity, specificity, positive predictive power and negative predictive power. Overall, the checklist appears to be a psychometrically valid predictor of faithful ACT implementation. Importantly, given the very high intercorrelations and high classification accuracies found, the checklist has the potential to classify ACT with similar accuracies to the original criterion measures.

RECOMMENDATIONS

The critical issue for the performance indicator project is to identify the number of persons who are currently receiving ACT best practice services. This problem is not isolated to the performance indicator project. Many persons and teams throughout the various states and nationally are working on how to identify faithfully implemented ACT sites. For example, although many states do not accredit or attempt to identify ACT sites, several states have statewide credentialing systems or allow national organizations to accredit ACT sites. Thus, among the 16 states in the performance indicator project, Texas, Illinois, and Rhode Island currently accredit their ACT teams using state approved criteria. Indiana also recently developed state standards for ACT. Moreover, there are now national ACT standards: CARF has recently developed and now offers standards for ACT, as does NAMI through the PACT initiative. Given that alternate methods to identify ACT exist that have the advantages of buy-in, choice, and the preferences that tend to attach to measures/standards developed and implemented locally, it is unlikely that one standard will emerge. Moreover, even when national standards exist, as is now the case with ACT, there may be sufficient differences between competing standards to create tensions between adherents to the different standards. The performance indicator project cannot change these realities.

Accordingly, it is recommended that a hierarchical system of operationally equivalent measures and standards for accrediting ACT used for purposes of the performance indicators project. In essence, this would allow states to choose among several options as follows:

1. States may use national accreditation when available. Currently these options would include CARF accreditation for ACT and NAMI PACT accreditation for ACT.
2. States also may choose to create and implement a statewide accreditation system for ACT. Such systems must have been carefully developed, follow a systematic plan, and have been validated against known criterion standards. I would suggest at a minimum that states validate their standards against either national standards when available, the existing fidelity scales (DACTS) or against the ACT checklists.
3. States also could opt to use the available fidelity scales as an acceptable method to accredit ACT. States would have to follow the use recommendations of the particular fidelity scale chosen (e.g, on site interviews, verification procedures against consumer charts or center

service records, etc.). For these purposes, the DACTS fidelity scale is the primary available instrument to validate ACT.

4. For states who choose not to use, or who are not yet in a position to use, one of the above, they must use the ACT checklist.

In all cases, states must choose and use one of the options outlined above prior to reporting data for the ACT performance indicators.

STUDY RESULTS: Many of the 16-State Study states offer Assertive Community Treatment Services and can report on the percent of adults who receive such services. However, since the workgroup did not complete its work on the fidelity measure in time to go back to states to compile indicator results using the fidelity measure, no indicator results were calculated for this measure.

POPULATIONS:

- | | | |
|--|---------------------------------------|------------------------------------|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children | |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults | <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|---|--|
| <input type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|---|--|

WORKGROUP CHAIR: John McGrew (Indiana)

ASSERTIVE COMMUNITY TREATMENT PROGRAM INFORMATION	
State _____ Contact person _____ Phone _____ Name of program _____ Date information collected ____/____/____ Program setting (e.g., rural, urban, mixed) _____ Date ACT program started _____ Percent of ACT caseload with SMI _____ ACT team caseload size: _____	
Number items fully met	Assertive Community Treatment Checklist Component Created by John McGrew, adapted from Critical Components of Assertive Community Treatment Interview and Dartmouth Assertive Community Treatment Survey
____/4 = _____ score	ACT programs use a team approach for treatment as defined by: <input type="checkbox"/> team size of at least three FTE staff/members (at least half of staff are full-time, i.e., NOT part time) Enter team size using number of full time equivalent staff _____ Enter definition used for full-time worker (e.g., 40 hours / week) _____ hours/week <input type="checkbox"/> shared caseloads for treatment planning (all staff involved in treatment planning for all consumers) <input type="checkbox"/> shared caseloads for treatment provision (all staff can & do see all consumers—also see brief definitions) <input type="checkbox"/> daily team meetings attended by all members.
____/3 = _____ score	The ACT team makeup is: <input type="checkbox"/> multi-disciplinary (e.g., some combination of mental health counselors, case workers, social workers, vocational counselors, substance abuse counselors) and must include: <input type="checkbox"/> a full-time registered nurse or equivalent (at least 70% of time dedicated to ACT) as member of team <input type="checkbox"/> a psychiatrist available to the team at least 12 hours per week for every 50 consumers on the caseload.
____/3 = _____ score	The team assumes ultimate clinical responsibility for the client <input type="checkbox"/> as a philosophy (i.e., the "buck stops here", a single point of entry to services), <input type="checkbox"/> organizationally (e.g., team designated as primary therapist of record) <input type="checkbox"/> as primary provider of treatment (i.e., treatment is NOT brokered to other services).
____/3 = _____ score	Intensive treatment as defined by: <input type="checkbox"/> individualized treatment (treatment not based on a menu of standardized treatments/programs, treatment plans/goals/contacts are designed/executed to fit the unique needs of each individual) <input type="checkbox"/> easily available when needed (consumers can quickly and easily make contact with team members, either brokered thru crisis team or directly, anytime 24 hours a day, 7 days a week) <input type="checkbox"/> appropriately intensive (average of at least 2 contacts per week per client).
____/3 = _____ score	ACT team members continue to maintain close involvement with client's treatment when hospitalization is required: <input type="checkbox"/> coordinate closely with hospital personnel concerning all hospital admissions (at least 65% of admissions) <input type="checkbox"/> coordinate closely with hospital personnel concerning all discharge decisions/plans (at least 65% of discharges) <input type="checkbox"/> continue to stay in contact with consumers when they are in the hospital (at least 65% of consumers).
____/5 = _____ score	The ACT team maintains a primary treatment focus on supporting consumers to live successfully in the community including assistance with: <input type="checkbox"/> obtaining basic needs/entitlements (e.g., SSI/SSDI, welfare, HUD waivers, housing, food, medicaid, etc.) <input type="checkbox"/> medication/symptom management (e.g., monitor symptoms, help insure medication compliance) <input type="checkbox"/> living skills (instruction or help in ADLs, IADLs) <input type="checkbox"/> increasing overall quality of life (e.g., client satisfaction in broad array of life domains--financial, housing, relationships, family, vocational, recreational, health, etc.) <input type="checkbox"/> increasing community tenure (e.g., focus on maintaining client in community NOT hospital).
____/2 = _____ score	Participative treatment model: <input type="checkbox"/> consumers are fully involved in treatment planning (client assumes at least 50% of responsibility for treatment decisions) <input type="checkbox"/> the team consults/works with family/significant others when appropriate (average 1 contact every 2 weeks)
____/2 = _____ score	The ACT treatment team is assertive in: <input type="checkbox"/> engaging consumers in treatment and <input type="checkbox"/> retaining consumers (e.g., 15 mos of refusals before stopping attempts to engage/retain).
Score 1 if fully met, 0 otherwise	
	ACT team has a designated team leader/coordinator who provides direct services to consumers on ACT team and whose responsibilities are limited to the ACT team.
	The majority of treatment contacts occur in the home or community (minimum of 60%), NOT in the office.
	The ACT team has a small client:staff ratio. Client:staff ratio no greater than 15:1.
	The ACT team successfully engages and retains consumers (at least 80% retained over a 12-month period)
	Consumers never discharged from the ACT team, although when appropriate, consumers may "graduate" to less intensive services (graduation typically limited to less than 10% of consumers per year, no credit if > 20% per year).
	Admission to the ACT team is reserved for consumers with severe and persistent mental illness meeting specific admission criteria, especially targeting consumers who require more intensive services (e.g., homeless, co-occurring substance abuse, history of frequent hospital use).

ACT Checklist General Instructions

Identify putative ACT sites and the clinical director of the identified ACT team.

- Mail or otherwise deliver copies of the checklist to the clinical director. The clinical director should then attempt to fill out the checklist to the best of his/her capability working from records and consulting with other team members as needed.
- Arrange a time to call the clinical director to go over his/her responses to the checklist items. During the phone call go over each item and ask the director his/her understanding of the item. After insuring that the clinical director correctly understood the item, then ask for his/her rating of the item. Also ask the director to identify his/her data source for making the item rating (best guess, team records). Inform the clinical director of any discrepancies in the use of the checklist. If you identify a discrepancy in the use of the checklist that may have affected an item rating, try to come to an agreement with the clinical director in the understanding of or in the rating of the item. However, your judgment, and not that of the clinical director, should take precedence in the final rating.
- All items and subparts of items are to be rated as either present or absent. If a program cannot fully meet the criteria contained within an item it should be given a score of 0 on that item or subpart.

ACT Brief Definitions

Full time equivalent - one FTE unit refers to 40 hours per week or more of full-time responsibilities dedicated to the ACT team. However, the definition of full-time may vary by state, such that 35 hours may be considered full-time in some locales. An FTE may be satisfied by one person working full-time or two or more part time employees whose hours sum to at least 40 hours (may replace 40 hours with the local standard for full-time work).

Shared caseloads - indicates that all team members are involved in the direct provision of services (one item) or treatment planning (second item) for all clients. For shared caseloads for service provision, a rule of thumb here is that at least 90% of caseload has contact with more than one staff member during a two week period.

Multidisciplinary - by definition to be multidisciplinary the team cannot be made up exclusively of one type of practitioner (e.g., all general caseworkers) or one degree credential (e.g, all nurses, all social workers, all MS in psychology).

Ultimate clinical responsibility -

A. as a philosophy means that ACT team sees itself as the entity that must take responsibility for the client's care, both proactively and if necessary reactively;

B. organizationally means that ACT team is the designated entity with primary responsibility for the client's treatment within the organization;

C. as primary provider means that in addition to case management and psychiatric services team provides most needed services, as a rule of thumb at least 3 of following services - counseling/psychotherapy, housing support, substance abuse, employment, rehabilitation services

Intensive treatment - easily available means that team can be directly contacted via phone during normal hours of operation AND at minimum team makes decisions with respect to clients' needs for services, providing direct team services if needed, 24 hours a day, 7 days a week during emergency situations

Close involvement with client's treatment when hospitalizations required -

A. hospital admissions, at least 65% of admissions initiated by team,

B. hospital discharges, at least 65% of discharges done in cooperation with team

Participative treatment model

A. Clients fully involved , at least 50% of responsibility for treatment decisions rest with client

B. Team consults with family, team averages one contact every two weeks with client's support system

Rural/urban site - use the Federal definition for rural/urban (places, villages, towns, etc. of at least 2500 persons are considered urban, otherwise they are considered rural)

INDICATOR: Q6 PERCENTAGE OF ADULTS WITH A SERIOUS MENTAL ILLNESS RECEIVING SUPPORTED EMPLOYMENT

RATIONALE FOR USE: Evidence-based services that promote long-term recovery should be important components of any system that serves people with serious mental illnesses. The workgroup recognizes that not all states offer Supported Employment programs, and that not all persons with serious mental illnesses necessarily need such services, however research has demonstrated the effectiveness of these services for many consumers in obtaining and maintaining competitive employment.

Supported employment was originally developed by Paul Wehman and colleagues (Wehman, 1986; Wehman & Moon, 1988) to help place and support persons with developmental disorders in competitive jobs in integrated settings. Since about the mid-1980s, SE has been adapted and used for persons with mental illness, integrating ideas from Wehman's original model, ACT, the job coach model and the clubhouse model (Bond, Drake, Mueser, & Becker, 1997). During the past decade, a substantial body of research has emerged showing the clear superiority of SE in obtaining competitive work compared both to no vocational programming and to other forms of vocational programming (e.g., sheltered work, transitional employment). In a recent review, Bond and colleagues (1997) identified 7 pre-post studies, and 8 controlled studies (of which 6 were randomized) of SE and concluded that across studies, 58% of consumers in SE programs were employed vs. 21% for control subjects. SE consumers also tended to be employed longer and to earn more, and, contrary to fears from detractors, did not report either increased stress or increased use of the hospital.

APPROACH TO MEASURE: This measure – with the other exemplary services – is intended to reflect quality and appropriateness by monitoring the extent of the implementation of these services. The 16-State Study Workgroup has developed a checklist survey that can be used to assess the extent to which a program meets criteria to be included as a "Supported Employment" (SE) program.

A critical issue for the 16-State Study was that states used different definitions of SE. Moreover, there were no common procedures in place to insure comparability between states when reporting the indicator. To help further define and develop the SE indicator, a series of pilot studies were undertaken (1) to survey the 16 states about the extent of SE implementation in their state, (2) to identify the definitions of SE used in the state, and (3) to develop simplified checklists for SE that could be used to verify that programs identified as SE were comparable and adhered to expert guidelines.

MEASURE(S): Although many states have services they describe as "supported employment", these services may be conceptualized and operationalized differently. A critical element to this measure is the definition of what are SE services to count in the numerator. The 16-State Study, through the work of John McGrew and others in Indiana led the work to pilot the development of an SE checklist to assure fidelity of services reported as SE.

Numerator: The number of consumers with severe mental illnesses receiving supported employment services. (Using a standardized definition of SE, preferably measured for fidelity by a standardized instrument).

Denominator: Total number of persons served in the community 18 and older, with any serious mental illness (Unduplicated).

It is recommended that some standardized method be used for identifying consumers to be counted in the numerator. The 16-State Study Workgroup on SE developed and tested an instrument to measure the fidelity of a program to SE standards. The survey is attached below.

CURRENT IMPLEMENTATION RESULTS: The survey results for SE showed that 10 of 11 states were implementing SE, 8 had operational definitions of SE, but only 4 collected information on who received SE, and only 2 of those reported the information. Only two states appeared to have in place adequate methodology to measure implementation (e.g., data collection plan, record audits, SMHA monitoring of programs). In addition, there was no common scale noted to measure SE. Moreover, there was considerable conceptual ambiguity in definitions of SE across the 16 states. Six of the eight states reporting operational definitions deviated in some degree from published definitions of SE (e.g., Bond et al., 1998). Common problems included confusing SE with any vocational programming, defining transitional employment as an instance of SE, and defining enclave work as an instance of SE.

Based on the results of the survey, three core issues/problems affecting comparability when collecting the SE indicator were identified: definitional confusion (e.g., transitional vs. supported employment), general broadening of the concepts (SE defined as any vocational program), and use of providers to collect and verify the data (no monitoring or training by state agency, lack of state-level auditing procedures). One clear issue for the performance indicator project, then, demonstrated by both the survey results and the fidelity literature, is the need to verify and measure implementation of SE prior to concluding that services are actually being received. Although fidelity instruments exist for SE (e.g., IPS fidelity scale: Bond, Becker, Drake, & Vogler, 1997, Quality of Supported Employment Implementation Scale: Bond, Picone, et al., 2000), they tend to be fairly long and require a considerable investment of resources (on-site visits, staff interviews, auditing of client records, etc.). An alternate approach for purposes of the current project was to develop simplified checklists. Checklists were thought to be more consistent with the competing needs both to assess SE implementation and to be sensitive to the service system demands of implementing the entire performance indicators package.

Following this study, the SE workgroup followed the procedures discussed under the ACT Indicator above, to develop and test a checklist for SE services.

SUPPORTED EMPLOYMENT RESULTS. We collected data from 81 sites for the SE checklist. Data was collected from five states: Connecticut (n=38), Indiana (n=23), Vermont (n=10), New York (n=8), and Washington DC (n=2). Twenty-five sites also provided concurrent data from the QSEIS and IPS fidelity scales. As was true with the ACT pilot, states used different sampling strategies in selecting sites. Some states only sampled sites thought to be faithful to the SE model (New York), whereas other states sampled a mix of SE sites and general vocational programs to help provide more variability when testing the ability of the checklist to identify SE programs (e.g., Vermont, Connecticut, Indiana).

DISCUSSION OF RESULTS: The primary purpose of the data collection was to validate a new brief checklist created to help in identifying SE best practice sites. To validate the checklist, several states were asked to use both the novel checklist and known criterion fidelity measures to classify potential SE sites. The results supported the validity of the novel checklist. The

checklist had a generally acceptable level of reliability as evidenced by internal consistency alpha coefficients, although the SE checklist probably includes 3 or 4 subscales. The checklist was then used to attempt to classify pre-identified criterion SE sites. The SE checklist correlated quite highly with its criterion fidelity scales and showed good ability to identify criterion-classified positive and negative sites, as evidenced by good sensitivity, specificity, positive predictive power and negative predictive power. Overall, the checklist appears to be a psychometrically valid predictor of faithful SE implementation. Importantly, given the very high intercorrelations and high classification accuracies found, the checklist has the potential to classify SE with nearly the same accuracy as the original criterion measures.

RECOMMENDATIONS: The critical issue for the performance indicator project is to identify the number of persons who are currently receiving SE best practice services. This problem is not isolated to the performance indicator project. Many persons and teams throughout the various states and nationally are working on how to identify faithfully implemented SE sites. For example, although many states do not accredit or attempt to identify SE sites, several states allow national organizations to accredit SE sites. State wide accreditation for Supported Employment also is available although not as consistently as ACT (Indiana determines SE using a SE technical assistance center monitoring program). Given that alternate methods to identify SE exist that have the advantages of buy-in, choice, and the preferences that tend to attach to measures/standards developed and implemented locally, it is unlikely that one standard will emerge. The performance indicator project cannot change these realities.

Accordingly, it is recommended that a hierarchical system of operationally equivalent measures and standards for accrediting SE be used for purposes of the performance indicators project. In essence, this would allow states to choose among several options as follows:

1. States may use national accreditation when available.
2. States also may choose to create and implement a statewide accreditation system for SE. Such systems must have been carefully developed, follow a systematic plan, and have been validated against known criterion standards. I would suggest at a minimum that states validate their standards against either national standards when available, the existing fidelity scales (QSEIS) or against the SE checklist.
3. States also could opt to use the available fidelity scales as an acceptable method to accredit SE. States would have to follow the use recommendations of the particular fidelity scale chosen (e.g, on site interviews, verification procedures against consumer charts or center service records, etc.). For these purposes, the IPS and the QSEIS fidelity scales are available to validate SE.
4. For states who choose not to use, or who are not yet in a position to use, one of the above, they must use the SE checklist.

In all cases, states must choose and use one of the options outlined above prior to reporting data for the SE performance indicators.

STUDY RESULTS: Many of the 16-State Study states offer supported employment services and can report on the percent of adults who receive such services. However, since the workgroup did not complete its work on the fidelity measure in time to go back to states to compile indicator results using the fidelity measure, no indicator results were calculated for this measure.

SOURCE/S OF INFORMATION: MIS, Medicaid data

POPULATIONS:

- | | | |
|--|---------------------------------------|------------------------------------|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children | |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults | <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|---|--|
| <input type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|---|--|

WORKGROUP CHAIR: John McGrew (Indiana)

SUPPORTED EMPLOYMENT PROGRAM INFORMATION	
State _____	Contact person _____ Phone _____
Name of program _____	Date information collected ____/____/____
Program setting (e.g., rural, urban, mixed) _____	Date SE program started _____
Percent of SE caseload with SMI _____	SE team active caseload size (i.e., receiving services): _____
Total number of persons with SMI in SE catchment area _____	
Number fully met	Supported Employment Checklist Component Created by John McGrew, adapted from Quality of Supported Employment Implementation Scale
____/4 = _____ score	SE programs use a team approach for treatment as defined by: <input type="checkbox"/> team size of at least three FTE members (e.g., employment specialists, job coach) Enter team size using number of full time equivalent staff _____ Number who are Full time _____ Enter definition used for full-time worker (e.g., 40 hours / week) _____ hours/week <input type="checkbox"/> team forms a distinct vocational unit, with shared office space (see brief definitions) <input type="checkbox"/> team shares caseloads for treatment planning (all members participate in treatment planning for all consumers), provides backup/support to other team members for treatment provision <input type="checkbox"/> regular team meetings (ES's meet as group with supervisor at least weekly)
____/4 = _____ score	SE services are integrated with clinical treatment services <input type="checkbox"/> Ideally, single agency provides both treatment and vocational services at same location, minimum requirement is that there is a single agency but different locations for treatment and vocational services <input type="checkbox"/> All ES's (ideally, but one team member at a minimum), regularly attend clinical treatment team meetings at least once/week <input type="checkbox"/> ES have frequent contact with treatment team (one contact/week-minimum) <input type="checkbox"/> Vocational and treatment team records are integrated (kept in same file)
____/2 = _____ score	Employment specialists (ES) provide continuous, intensive, vocational services <input type="checkbox"/> ES is responsible for carrying out all vocational services from intake through follow-along (vocational services are not brokered to other agencies or persons outside SE team) <input type="checkbox"/> ES responsibilities are limited to vocational services (i.e., at a minimum less than 30% of ES time spent on non-vocational services, excluding work necessary to support vocational services, for example, paperwork).
____/2 = _____ score	Consumers have minimal to no pre-screening requirements prior to admission to SE: <input type="checkbox"/> Consumers are not excluded based on vocational readiness or level of functioning <input type="checkbox"/> Consumers do not require case management approval prior to admission
____/4 = _____ score	SE engages consumers in vocational services rapidly <input type="checkbox"/> Rapid approval by payer of vocational services (e.g., VR), within 4 (max) weeks of referral, or no approval required (i.e., access to program not blocked by delays in approval for payment) <input type="checkbox"/> Consumers meet with ES within 2 (max) weeks of expressing initial interest in SE <input type="checkbox"/> Any vocational assessment needed as part of employment process completed within 2 (max) weeks for >90% of consumers <input type="checkbox"/> No pre-vocational assessment required
____/2 = _____ score	Rapid job placement <input type="checkbox"/> Majority of consumers (minimum > 60%) receive NO prevocational work-readiness training (e.g., no Transitional employment, job trials, classroom activities, sheltered work) <input type="checkbox"/> First job application within 2 (maximum) months of program entry
____/4 = _____ score	Job placements are: <input type="checkbox"/> community-based (i.e., not sheltered workshops, not onsite at SE or other treatment agency offices), <input type="checkbox"/> competitive (i.e., jobs are not exclusively reserved for SE consumers, but open to public), <input type="checkbox"/> in normalized settings (at least 50% of coworkers are not persons with disabilities), and <input type="checkbox"/> utilize multiple employers (< 40% [max] of jobs are with limited # of employers)
____/2 = _____ score	Individualized job search including: <input type="checkbox"/> Focus on consumer needs and preferences, not market requirements (<30% jobs are drawn from a pool of jobs created for generic job development) <input type="checkbox"/> Consideration of long-term career goals, opportunities for advancement and possible future jobs
____/3 = _____ score	Long-term (at least one year) follow-along/support after job placement which is: <input type="checkbox"/> continuous and individualized (e.g., considers preferences for involvement of coworkers in support) <input type="checkbox"/> includes consumer supports (e.g., crisis intervention, job coaching, job counseling) and <input type="checkbox"/> employer supports (e.g., education, guidance)
Score 1	
	Multiple jobs are permitted. Consumers have no set clinical or prevocational preconditions, or waiting times before beginning next job search (true for at least 65% of consumers at a minimum)
	The SE team has a small client:staff ratio. Client:staff ratio <31:1 (as a maximum)
	SE contacts occur in the home, at the job site, or in the community (> 40% of contacts minimum).
	The SE team is assertive in engaging and retaining consumers in treatment, especially utilizing face-to-face community visits, rather than phone or mail contacts
	The SE team consults/works with family and significant others when appropriate (at least monthly contact for >20% of consumers)

SE Brief Definitions

Full time equivalent – one FTE unit refers to 40 hours per week or more of full-time responsibilities dedicated to the SE team. However, the definition of full-time may vary by state, such that 35 hours may be considered full-time in some locales. An FTE may be satisfied by one person working full-time or two or more part time employees whose hours sum to at least 40 hours (may replace 40 hours with the local standard for full-time work).

Distinct vocational unit – Works as a team, team meets regularly, provide services for each others' cases, job leads, backup and support

Shared caseloads - indicates that all team members are involved in the planning of services for all consumers.

SE Brief Definitions

Full time equivalent - one FTE unit refers to 40 hours per week or more of full-time responsibilities dedicated to the SE team. However, the definition of full-time may vary by state, such that 35 hours may be considered full-time in some locales. An FTE may be satisfied by one person working full-time or two or more part time employees whose hours sum to at least 40 hours (may replace 40 hours with the local standard for full-time work).

Distinct vocational unit - Works as a team, team meets regularly, provide services for each others' cases, job leads, backup and support

Shared caseloads - indicates that all team members are involved in the planning of services for all clients.

INDICATOR: Q7 PERCENTAGE OF ADULTS WITH A SERIOUS MENTAL ILLNESS RECEIVING SUPPORTED HOUSING

RATIONALE FOR USE: Evidence-based services that promote long-term recovery should be important components of any system that serves people with serious mental illnesses. The workgroup recognizes that not all states offer Supported Housing programs, and that not all persons with serious mental illnesses necessarily need such services, however research has demonstrated the effectiveness of these services for many consumers.

APPROACH TO MEASURE: This measure – with the other exemplary services – is intended to reflect quality and appropriateness by monitoring the extent of the implementation of these services. The 16-State Study workgroup on Living Arrangement looked at a potential indicator of Supported Housing as part of its collection of information about the living arrangement of mental health consumers. The workgroup has not developed a fidelity measure to assess the extent to which a program meets criteria to be included as a “Supported Housing” (SH) program.

MEASURE(S): Although many states have services they describe as “supported housing”, these services may be conceptualized and operationalized differently.

Recommended Definition: Supported Housing helps people with special needs to successfully select, obtain, and maintain safe, decent, affordable housing that is linked to individualized and flexible services provided within the community.

Numerator: The number of consumers with severe mental illnesses receiving supported housing services.

Denominator: Total number of persons served in the community 18 and older, with any serious mental illness (Unduplicated).

Recommended Coding Categories:

1. **Yes**, person receives services from a Supported Housing Program
2. **No**, person does not receive services from a Supported Housing Program
3. **Not Applicable**, Supported Housing Programs not available.
4. **Unknown**

Proposed Frequency of Reporting Living Situation:

1. At time of Admission
2. Periodically: Annually; Semi-Annually
3. At time of Discharge

CURRENT IMPLEMENTATION STATUS: Results for this indicator were not compiled by any of the 16-State Study workgroups. Only a few states reported data on the percent of consumers receiving supported housing services. Five states reported data on persons receiving supported housing services. The median percent of consumer who received supported housing services during a year was 4.6%, with a range from 1.4% to 7.7%.

The Living Situation workgroup compiled information on the number and percent of adult consumers who were living in private residences “with Support”. This collection is based on different definition than persons receiving supported housing services, since it compiled information as part of the collection of consumer living situation. This workgroup received data from four states. The results reported by the four states showed three states with a similar percent living in private residences receiving support (rates ranged from 16.4% to 17.6%), and one state with a significantly lower rate (0.5%).

SOURCE/S OF INFORMATION: MIS, Medicaid data

POPULATIONS:

- | | |
|--|--|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|---|--|
| <input type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|---|--|

ISSUES: If an indicator of the percentage of consumers receiving supported housing services is to be comparable between states, a method of assuring that the supported housing services being reported are comparable is needed. This suggests that the work on a fidelity measure, like those prepared by the Evidence-Based Services workgroup on Assertive Community Treatment and on Supported Employment may be needed for Supported Housing Services. The definition of Supported Housing needs to be updated to reflect the recently completed CMHS Supported Housing evaluations.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Nancy Callahan: Living Situation Workgroup

INDICATOR: Q8 ATYPICAL ANTIPSYCHOTIC MEDICATION USE

RATIONALE FOR USE: The public mental health system works hard to ensure that consumers are receiving treatment that is consistent with “best practices.” New generation (atypical) antipsychotic medications have been found to be preferable to many older agents in the treatment of Schizophrenia in particular, and psychoses more generally. Therefore, the extent to which such agents are available in the community mental health system may be one indication of the degree to which consumers with such mental illnesses are receiving optimal treatment.

APPROACH TO MEASURE: Three different types of measures were proposed/developed by the Atypical Antipsychotic workgroup of the 16-State Study to measure the extent of atypical medication usage in the public mental health system. However, the one measure that had the most cross-state consensus regarding its utility, also happened to be the one that could be collected from a substantial number of participating states. That measure is the focus of this summary report:

MEASURE(S):

Measure 1: Percentage of Persons with a 295 Diagnosis (Schizophrenia) that Receive Atypical Antipsychotic Medications.

For states that collect multiple diagnoses, only the primary diagnosis was used when reporting counts of:

Numerator: The number of persons with a primary 295 diagnosis receiving a scheduled or standing order of one or more atypical antipsychotic medications (see list of atypical antipsychotic medications below) at any time during their treatment in the fiscal year.

Denominator: Count of all persons with a primary 295 diagnosis receiving treatment during the same fiscal year.

Only the following medications were included as antipsychotic medications for this indicator:

Traditional: Chlorpromazine, Mesoridazine, Trifluoperazine, Fluphenazine, Molindone, Thioridazine, Haloperidol, Perphenazine, Thiothixene, Loxapine, and Pimozide

Atypical: Clozapine, Quetiapine, Olanzapine, Risperidone, Ziprasidone, Other Approved Agents

Reporting Guidelines: Several additional data collection/calculation guidelines were established in order to keep reporting as comparable as possible across participating states. They include:

1. Settings. Counts of persons receiving antipsychotic medications were collected separately for hospital and community settings, defined as follows:

Hospital: Included the following hospital types:

- a. A psychiatric institution that is operated by the state mental health authority
- b. A state operated general hospital with inpatient psychiatric services
- c. A non-state operated hospital that provides inpatient psychiatric services, purchased by the state mental health authority. This does not include services reimbursed by Medicaid.

Community: Any community provider that is operated or funded (in full or in part) by the state mental health authority.

Counts were unduplicated within and between all hospital settings. Counts were also unduplicated within and across all community providers. However, note that counts were duplicated across hospital and community settings for consumers/consumers served in both settings.

2. Time frame. Data was to be collected by fiscal year.

3. Population. Although it was preferred that this indicator be collected on all consumers served, samples were submitted by some states as indicated in Table 1 of the Results section below.

4. Prescriptions. In order to more accurately capture the percentage of consumers taking atypical medications, the numerator of this indicator specified the count to be of medications received (filled). Whether or not states could report information on medications that were "prescribed" vs. "received" (filled) was labeled accordingly in Table 1 of the Results section below.

5. Order.* It was preferred that only consumers who receive new generation or traditional antipsychotic medications as a result of a "standing" or "scheduled" order (e.g., BID, TID, QD) be counted. Thus, consumers who receive medications only "as needed," "p.r.n.," "now," or "stat" were not to be included in this indicator. Whether or not a state was able to limit their count to those with "standing" or "scheduled" orders was labeled accordingly in Table 1 of the Results section below.

6. Demographics. Counts were broken out by the following demographics: Gender, Age, Race/Ethnicity, and Diagnosis.

*Note: Portions of the Antipsychotic Medication measure and reporting guidelines were adopted from the NRI Behavioral Healthcare Performance Measurement System. Information regarding the NRI performance measurement system can be viewed at: <http://dmhmrs.chr.state.ky.us/nripms>.

CURRENT IMPLEMENTATION STATUS: Eleven out of 16 states had access to data for this measure from either their hospital or community settings, although there were four states able to provide data for both settings (e.g., Arizona, Colorado, Texas, and Vermont). Colorado, Texas, and Vermont reported separate rates for state hospitals and community programs, while Arizona reported a combined rate for both state hospitals and community patients. The vast majority of these states were able to provide FY2000 data on the entire client population, regardless of the type of treatment setting. However, Connecticut, Illinois, Utah and Washington provided data for a different time frame (i.e., FY1999, CY2000, FY2001 respectively), and a few states were able to provide data on just a sample of consumers (i.e.,

Connecticut, Colorado, and Rhode Island). Arizona was only able to report hospital and community data combined. Note also that there was variety in terms of whether or not the data reported included prescribed medications vs. filled prescriptions, and the type of order ("standing" and "scheduled" orders only, or others as well, such as "as needed," "stat," etc.). For all of the above reasons, comparisons of this measure across states should be made with extreme caution.

STUDY RESULTS: Overall, the median for the state hospitals was 73.5%, with a range from 24% to 93%. In community settings, the median percentage of persons with a 295 diagnosis who received atypical medication was lower - - at 57.6%, with a range of 44% to 70%.

Table 1. Percentage of persons with a primary diagnosis of 295 receiving atypical medications in hospital settings.			
	Number Receiving Atypicals	Total Served with Diagnosis 295	Percent
CO	649	883	73%
CT	381	523	73%
DC	137	563	24%
IL	2,562	3,249	79%
NY	6,446	11,700	55%
TX	4,118	5,016	82%
UT	142	152	93%
VT	98	134	72%
WA	1,361	1,707	80%
Median	649	883	73.5%

The above table includes children and adolescents who represented smaller numbers of persons served with diagnosis of 295. The table was also computed for adults (18 and older). As the table below indicates, there was no change in the percentages.

Table 2. Percentage of Adults (ages 18 and older) with a primary diagnosis of 295 receiving atypical medications in hospital settings.			
	Adults Receiving Atypicals	Total adults with 295 Diagnosis Served	Percent
CO	633	863	73%
CT	381	523	73%
DC	137	563	24%
IL	2,543	3,226	79%
NY	6,341	11,574	55%
TX	4,045	4,931	82%
UT	138	148	93%
VT	98	134	72%
WA	1,361	1,707	80%

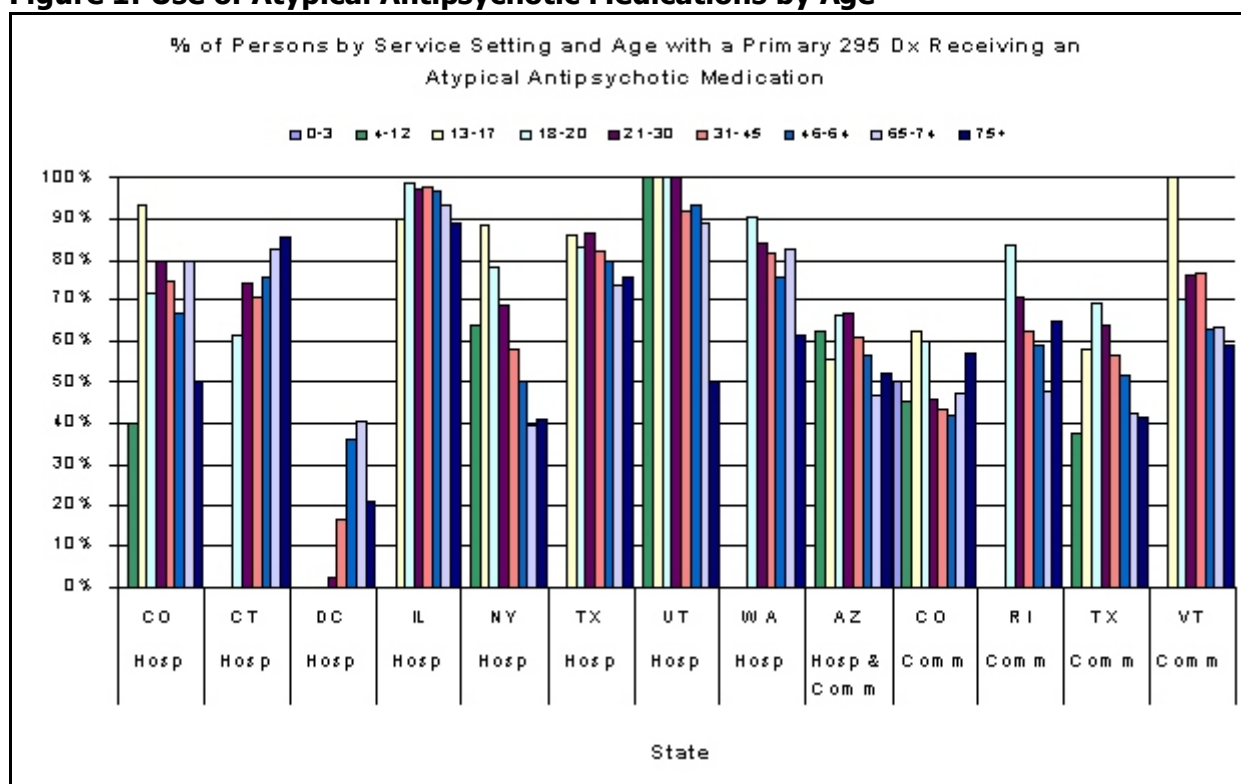
Table 3. Percentage of persons with a primary diagnosis of 295 receiving atypical medications in community settings.

	Number Receiving Atypical	Total Served with Diagnosis of 295	Percent
CO (FY00)	1,653	3,727	44%
RI (FY01)	423	706	60%
TX (FY00)	16,907	30,626	55%
VT (FY00)	639	916	70%
Median	4,905.5	8,993.75	57.6%
AZ (FY00) **	4,222	7,082	59.6%

** Arizona data represent use of atypical medications for both state hospital and community mental health clients combined.

When the use of atypical medications was examined by demographic characteristics, in general, across treatment settings (hospital and community) and state, younger people were more likely to be prescribed atypical medications than older people (see Figure 1). There did not appear to be major gender differences among states in the prescription of atypical medications (exceptions are noted in the workgroup report).

Figure 1: Use of Atypical Antipsychotic Medications by Age



When the use of atypical medications was examined by race/ethnicity, American Indians appeared to have consistently high rates of atypical medication usage across states, whereas the rate for Asians varied considerably. However, these results may be an artifact of low numbers in these categories. In examining the race/ethnicity categories of White, African-American and Hispanic, no clear pattern of atypical antipsychotic medication usage emerges in

hospital settings, however, there was suggestion of a trend across the states reporting data that African-Americans received atypicals at lower rates than the other two groups.

Table 4. Percentage of persons with a primary diagnosis of 295 receiving atypical medications in community settings (FY 2000).			
	African-Amer.	Hispanics	Whites
CO (FY00)	33%	40%	47%
RI (FY 01)	49%	61%	62%
TX (FY00)	47%	58%	59%
VT (FY00)	*	*	70%

(* The denominators for these percentages were less than 10.)

Populations:

- | | |
|--|--|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|--|--|

ISSUES: Clearly, some states participating in the 16-State Study are beyond the norm on this measure and it would be instructive to explore reasons for such differences. The fact that the indicator is focused on a specific diagnosis is an inbuilt control that allows for more compatibility across states than other measures.

Only 9 of the 16 states could report this measure for hospitals even though such data must be available at the hospital level. It is not clear why more states could not report this measure, and this may be worth exploring. States clearly had problems reporting these data for community settings: only four states could do so. (One state could not separate hospital data from community data.)

Finally, the differences in use of atypicals for African-Americans in community settings at lower rates appears consistent in the few states able to provide these data. This was an issue on hospital settings a few years ago that was easily remedied. Similar steps to ensure equity may be needed for community settings. At a minimum, this issue is worth further exploration.

CAUTION: Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Jocelyn Letourneau (Rhode Island)

INDICATOR: Q9 PERCENT LIVING IN A FAMILY-LIKE SETTING FOR CHILDREN AND ADOLESCENTS WITH A SERIOUS EMOTIONAL DISTURBANCE

RATIONALE FOR USE: Services for children and adolescents are best provided in the home or in home-like settings. To the extent possible, placing children and adolescents in 24-hour settings such as hospitals should be avoided.

APPROACH TO MEASURE: There are several potential methods to compile information on the percentage of children living in a family like setting. As part of the 16-State Study, the Children's Workgroup, led by Molly Brunk of Virginia surveyed participating states regarding their ability to report this indicator. The Children's Workgroup recommends compiling this indicator using a child/adolescent survey, such as the Youth Services Survey (YSS) or the Youth Services Survey for Families (YSS-F). Specific questions have been added to the YSS and YSS-F to gather the necessary information to calculate this indicator.

MEASURE(S): Percent of children and adolescents with SED served by the mental health authority who are living in a family-like setting while receiving services.

Numerator: The total number of unduplicated children and adolescents with a SED that lived in a family-like setting for the entire reporting period. Youth who spent one day in a non-family-like setting during the reporting period are excluded from the numerator.

Denominator: The total number of children and adolescents with SED served by the mental health authority during the reporting period.

Related Definitions:

Family-Like Setting: Living at home with parents, in a relative's home, or living in foster home. In other words, living in a setting that is not a jail, detention, hospitals, residential treatment setting, group homes, or homeless shelters.

Children With Serious Emotional Disturbance: "are persons from birth up to age 18, who currently or at any time during the past year, have had a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within DSM-III-R, that resulted in functional impairment which substantially interferes with or limits the child's role or functioning in family, school, or community activities." (pursuant to Section 1912(c) of the Public Health Service Act, as amended by Public Law 102-321).

SOURCE/S OF INFORMATION: Self-report through the YSS or YSS-F surveys

CURRENT IMPLEMENTATION STATUS: Virginia has completed a survey of the 16-State Study states regarding their ability to report this indicator. Seven (7) states report they can report this indicator if it is defined as "currently living in a family-like setting". The Children's Workgroup included necessary questions in the YSS and YSS-F surveys, but did not compile indicator results during the 16-State Study.

POPULATIONS:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|--|--|

ISSUES: Please refer to the discussion of the YSS and YSS-R surveys included under Indicators A2-C, Q4-C, Q11, and O2-C for details regarding issues related to the development and use of the YSS or YSS-F surveys.

WORKGROUP CHAIR: Molly Brunk and Randy Koch (Virginia)

INDICATOR: Q10 PERCENTAGE OF CHILDREN AND ADOLESCENTS WITH SERIOUS EMOTIONAL DISTURBANCES IN 24-HOUR SETTINGS WHO ARE IN THERAPEUTIC FOSTER CARE SETTINGS

RATIONALE FOR USE: Therapeutic Foster Care is considered the least restrictive form of out-of-home placement for children with severe emotional disorders. The Surgeon General's Report on Mental Health highlighted therapeutic foster care as an efficacious service. "Care is provided in private homes with specially trained foster parents. The combination of family-based care with specialized treatment interventions creates a 'therapeutic environment in the context of a nurturant family home.'"(p.176)

APPROACH TO MEASURE: There are several potential methods to compile information on the percentage of children with serious emotional disturbances living in therapeutic foster care settings. As part of the 16-State Study, the Children's Workgroup, led by Molly Brunk of Virginia surveyed participating states regarding their ability to report this indicator. The Children's Workgroup recommends compiling this indicator using a child/adolescent survey, such as the Youth Services Survey (YSS) or the Youth Services Survey for Families (YSS-F). Specific questions have been added to the YSS and YSS-F to gather the necessary information to calculate this indicator.

MEASURE(S):

Percentage of children with a serious emotional disturbance (SED) who resided in a therapeutic foster care setting during the last 6 months.

Numerator: Total number of children and adolescents with SED in therapeutic foster care at any time during the reporting period.

Denominator: Total number of children and adolescents with SED in any 24-hour supervised residential setting during the reporting period.

SOURCE OF INFORMATION: Self-report through the YSS or YSS-F surveys

CURRENT IMPLEMENTATION STATUS: Virginia has completed a survey of the 16-State Study states regarding their ability to report this indicator. Five states report they could report this indicator. The Children's Workgroup included necessary questions in the YSS and YSS-F surveys, but did not compile indicator results during the 16-State Study.

SOURCE OF INFORMATION: MIS

POPULATIONS:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|--|--|

ISSUES: Defining what residential settings are counted as therapeutic foster care programs is a key issue. The Surgeon General's report offers the following guidance: "Children are placed with foster parents who are trained to work with children with special needs. Usually, each foster home takes one child at a time, and caseloads of supervisors in agencies overseeing the program remain small. In addition, therapeutic foster parents are given a higher stipend than to traditional foster parents, and they receive extensive pre-service training and in-service supervision and support. Frequent contact between case managers or care coordinators and the treatment family is expected, and additional resources and traditional mental health services may be provided as needed." (p.176)

Please refer to the discussion of the YSS and YSS-R surveys included under Indicators A2-C, Q4-C, Q11, and O2-C for details regarding issues related to the development and use of the YSS or YSS-F surveys.

WORKGROUP LEADER: Molly Brunk and Randy Koch (Virginia)

INDICATOR: Q11 FAMILY PARTICIPATION IN TREATMENT PLANNING FOR CHILDREN AND ADOLESCENTS

RATIONALE FOR USE: While the MHSIP consumer survey was developed with a general population receiving services as respondents, many of the special concerns related to children's and family members' perspectives were not addressed. This resulted in an initiative sponsored by the 16-State Study to develop an appropriate perception of care survey for children's services.

APPROACH TO MEASURE: The Children's Indicators Workgroup recognized the need to develop and test a MHSIP- like consumer survey focused on the special treatment and life needs of children and adolescents. Ultimately, the workgroup designed two different survey's one for to be completed by adolescents and a second version to be completed by the parents of younger children. Building on the experiences of the developers of the adult MHSIP consumer survey and the instruments used in the CMHS Comprehensive Community Mental Health Service for Children and their Families Program, the workgroup identified 26 items scored on a five-point, Likert-type scale for inclusion in the surveys. These items were designed to measure the domains of access, appropriateness, outcomes, and satisfaction. For this population "appropriateness" included family involvement and cultural sensitivity. In addition, there were several items that assessed specific behavioral outcomes (e.g. out-of-home placement).

- **Developed the Youth Services Survey (YSS) and its counterpart, the Youth Services Survey for Families (YSS-F).** These surveys were designed to provide a means of collecting standardized information on domains similar to those measured by the MHSIP Consumer Survey but focusing on issues more relevant to children and their families. The YSS can be completed by youth age 13 years and older. Caregivers of the child consumer complete the YSS-F.
- **Conducted a survey to determine states' interest and ability to collect additional outcome information.** This information is needed for recommended indicators on school attendance, out of home placement, and juvenile justice involvement.
- **Developed recommendations and guidelines for states to use in collecting and reporting performance indicators for children's mental health.** "Guidelines for the YSS and YSS-F" can be found at <http://www.mhsip.org/surveylink.htm>.

MEASURE(S): The important aspect is to obtain the consumer perspective on the impact of the services received through a confidential, self-report mechanism. A consumer survey for the families of children and/or for adolescents to complete themselves is recommended.

The expectation is that an annual, cross-sectional survey of consumers be conducted that includes an assessment of consumers' perception of the outcome of services. It is recommended that the Youth Services Survey be used for adolescents over the age of 13, and the Youth Services Survey for Families (YSS-F) be used for younger children. If one of the YSS surveys are used, perception of the access to services will be measured by responses to the following items:

Participation in Treatment:

- I helped to choose my child's services.
- I helped to choose my child's treatment goals.
- I was frequently involved in my child's treatment.

Scoring:

1. Exclude respondents with 2 or more missing values.
2. Calculate the mean of the items for each respondent.
3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree).

Numerator: Total number of respondents with an average scale score > 3.5.

Denominator: Total number of respondents.

CURRENT IMPLEMENTATION STATUS: By the end of the project's reporting period, 10 of the 14 state mental health agencies that served youth had implemented at least one of the surveys. Seven states surveyed both caregivers and youth, two states collected the YSS-F only, and one state collected only the YSS. The majority of states used a sample that was representative at the state level. In addition to the states participating in the Sixteen State Indicator Project, the YSS and YSS-F have been used in at least four other states to assess consumer perceptions of their public mental health services. One of the additional states, Kentucky, contributed its data to the project. Overall results are presented below.

Table 1. Performance Indicators Based on Family Surveys

	YSS		YSS-F	
	N	Percent	N	Percent
Good Access to Services	225	68	1542	73.8
Participation in Treatment	574	58	1539	72.8
Cultural Sensitivity of Staff	226	77.9	1539	82.3
Satisfaction with Services	225	65.3	1541	64.1
Positive Outcome of Service	582	56.7	1538	45.6

STUDY RESULTS: Table 2 below, shows results from the pilot survey for both the youth self-report survey and the parent survey. Caution should be given to interpreting these pilot study results, due to the small numbers of respondents in many consumer characteristics. CO, KY, OK, TX, VT, and VA all participated in the pilot study. In addition to the pilot states, DC, IN, NY, UT, and WA all have completed collection of data using either the YSS-F or YSS surveys. The data from these 5 additional states are not included in Table 3 below.

16 State Study Pilot: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F) Results: Family Involvement									
Demographic Breakdown	YSS		YSS-F		Youth Characteristics ³	YSS		YSS-F	
	N	Percent ²	N	Percent ²		N	Percent ²	N	Percent ²
TOTAL	574	58.0%	1,539	72.8%					
Gender					Court involved last 6 months				
Male	283	56.6%	969	72.4%	Yes	46	52.2%	213	69.5%
Female	297	59.9%	533	73.9%	No	176	57.6%	1,284	73.4%
Unknown	7	33.3%	37	67.6%	Unknown	4	0.0%	42	73.8%
Race					Absent from school last month				
American Indian/Alaskan Native	16	50.0%	35	60.0%	Yes	104	58.7%	446	71.5%
White	371	55.5%	963	73.0%	No	93	57.3%	505	79.2%
Black	40	60.5%	340	73.5%	Unknown	32	53.3%	588	68.4%
Asian/Pacific Islander	---	---	2		On psychotropic meds				
Other	50	62.0%	165	73.9%	Yes	121	59.3%	1,015	74.6%
Unknown	109	65.7%	34	67.6%	No	103	54.5%	489	69.5%
Hispanic ³					Unknown	5	0.0%	35	68.6%
Yes	68	61.8%	167	73.7%	Currently in service				
No	146	58.0%	1,285	73.6%	Yes	125	67.2%	1,103	76.7%
Unknown	15	25.0%	90	59.8%	No	96	42.6%	372	61.3%
Age					Unknown	8	85.7%	64	73.4%
0 - 3	---	---	7	71.4%	Currently living at home				
4 - 12	17	56.3%	905	76.0%	Yes	170	59.3%	1,397	73.5%
13 - 17	493	57.5%	543	69.8%	No	52	48.0%	103	64.1%
18 and older	47	60.0%	35	51.4%	Unknown	7	83.3%	39	71.8%
Unknown	30	64.3%	49	63.3%					
Medicaid									
Yes	484	58.2%	1,090	72.6%					
No	86	60.0%	396	72.5%					
Unknown	17	40.0%	53	81.1%					

¹ Family involvement defined as average score on questions 8, 9 & 13 > 3.5. Cases with 2 or more missing values excluded.

² Percent of respondents in each category who met criteria for this indicator.

³ Data element not collected by VT, therefore, VT cases excluded from analysis of the Hispanic variable and all Youth Characteristics.

SOURCE/S OF INFORMATION: Consumer Survey; recommended measure: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F).

POPULATIONS:

- ☒ Children with a Serious Emotional Disturbance
 ☐ Adults w/ a Serious Mental Illness
- ☒ All Children
 ☐ All Adults
 ☐ Geriatric

SETTINGS:

- ☐ Psychiatric Inpatient Settings
 ☒ Community-based Settings

ISSUES: Two surveys (YSS and YSS-F) have been developed to assess perceptions of the quality of mental health services provided to youth. These surveys can be found at <http://www.mhsip.org/surveylink.htm>. Data obtained through the 16-State Study indicates that the surveys reliably measure constructs of access to services, participation in treatment, cultural sensitivity of staff, satisfaction with services, and outcomes. In addition, several other items on the surveys will facilitate the evaluation of mental health services on other important indicators of performance.

While this project has made great strides towards specifying and standardizing some critical performance measures for children's mental health services, the workgroup hopes to continue working to expand our knowledge and improve the tools to measure performance in this area. Future efforts will compare telephone survey vs. mail survey methodologies, evaluate the

usefulness of these indicators in evaluating performance over time, and examine the effects of risk adjustment on the children's performance indicators.

To assure comparability among survey results, not only must similar surveys be used, but the populations covered, the sampling methodologies used and the administration of the survey should also be comparable across states.

The Workgroup also explored the addition of new questions to the YSS and YSS-F to provide information needed for other child and adolescent indicators in the NASMHPD Framework. The proposed YSS and YSS-F include additional questions needed to calculate indicators related to "links to physical health services", "Out-of-home placements", "percentage of youth living in family like settings", and "use of therapeutic foster care services".

Finally, efforts are being made to collaborate with developers of the ECHO surveys. This workgroup has a commitment to reach consensus on a single instrument or set of items that can be used to evaluate mental health services in both the private and public sectors.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Molly Brunk and Randy Koch (Virginia)

INDICATOR: Q12 READMISSION TO ANY STATE HOSPITAL WITHIN 30/180 DAYS OF DISCHARGE

RATIONALE FOR USE: A major outcome of the development of a community-based system of care is expected to be reduced utilization of state and county-operated psychiatric inpatient beds. The goal is to decrease the number of consumers being readmitted to state psychiatric inpatient care within 30/180 days of being discharged.

APPROACH TO MEASURE: The total number of admissions to any state psychiatric inpatient care that occurred within 30 and 180 days of a discharge from a psychiatric inpatient care during the past year divided by the total number of discharges during the year.

Percent readmitted is derived by dividing the number of episodes of readmission by the total number of discharges during a year in a state. Percent readmitted is presented by state, and for age (less than 18, 18-64, and 65+), sex, race, and diagnosis.

MEASURE(S):

Numerator: The number of readmissions to a state operated psychiatric hospital inpatient unit within a specified time period after discharge (not duplicated by episode). Discharged is defined as returned to any state hospital without contingency; this would exclude those who were not discharged, including on leave, visits, leaves without consent, and elopements.

Denominator: The total number of discharges from a psychiatric hospital (not unduplicated by episode). Discharged is defined as released from the hospital without contingency; this would exclude those who are released on leave, including visits, leaves without consent and transfers.

Data Note: For the 30 day readmission rate the numerator is based on readmissions in a 13 month period. For the 180 day readmission rate, the numerator is based on readmissions in an 18 month period.

Issues in developing comparable standardized measures: The data for each of the state's reporting data represent different populations.

The data for nine states includes forensic and substance abuse populations, though for three states, the substance abuse population included are only those with a co-occurring substance abuse diagnosis. The data for three states include the forensic population but exclude the substance abuse population. In two states, the data include the substance abuse population but exclude the forensic population. In two states neither the forensic nor the substance abuse population are included.

- **Arizona:** Includes forensic and persons with co-occurring substance abuse diagnoses.
- **Colorado:** Includes co-occurring substance abuse population (but not forensic population).
- **Connecticut:** Excludes forensic population and people treated for substance abuse diagnoses.

- **District of Columbia:** Includes forensic population but not substance abuse population.
- **Illinois:** Includes forensic population and consumers with co-occurring substance abuse diagnosis. Does not include consumers with co-occurring developmental disabilities.
- **Indiana:** Includes forensic and substance abuse populations.
- **Missouri:** Includes forensic and substance abuse populations.
- **New York:** Includes forensic population but not substance abuse population.
- **Oklahoma:** Does not include forensic or substance abuse populations.
- **Rhode Island:** Does not include forensic and substance abuse only populations. Includes SMHA-contracted beds in a private hospital as well as psychiatric beds in a long-term state general hospitals.
- **South Carolina:** Does not include forensic or substance abuse populations.
- **Texas:** Includes forensic population, a special research population, and some persons with mental retardation. Substance abuse population only included when person is dually diagnosed with a mental illness.
- **Utah:** Includes forensic and substance abuse populations.
- **Virginia:** Includes substance abuse population but not forensic population. Also includes persons with co-occurring mental retardation/mental health diagnosis in state hospital.
- **Vermont:** Includes forensic and substance abuse populations.
- **Washington:** Includes forensic population. Includes some persons with a co-occurring substance abuse diagnosis. Includes some persons with a co-occurring developmental disability diagnosis.

CURRENT IMPLEMENTATION STATUS: All states can report data for this indicator, when the indicator is readmission to a state-operated psychiatric facility. The data reported is not for a common population due to variations in the types of consumers served in state facilities. Variations in reporting populations are discussed above.

States were able to consistently calculate this indicator for consumers discharged from state facilities who may have had a second admission with 30 days or 180 days, but were admitted to a general hospital or private psychiatric hospital. Several states are working to use Medicaid and other data sources to try and calculate this measure of readmission to any psychiatric hospital with 30 days or 180 days

STUDY RESULTS: All states reported readmission rates for either FY2000 or CY2000. The median 30-day readmission rate was 8.2% with a range of 0.3% to 13.6%. The median 180-day readmission rate was 18.1% with a range of 3.1 to 29.2.

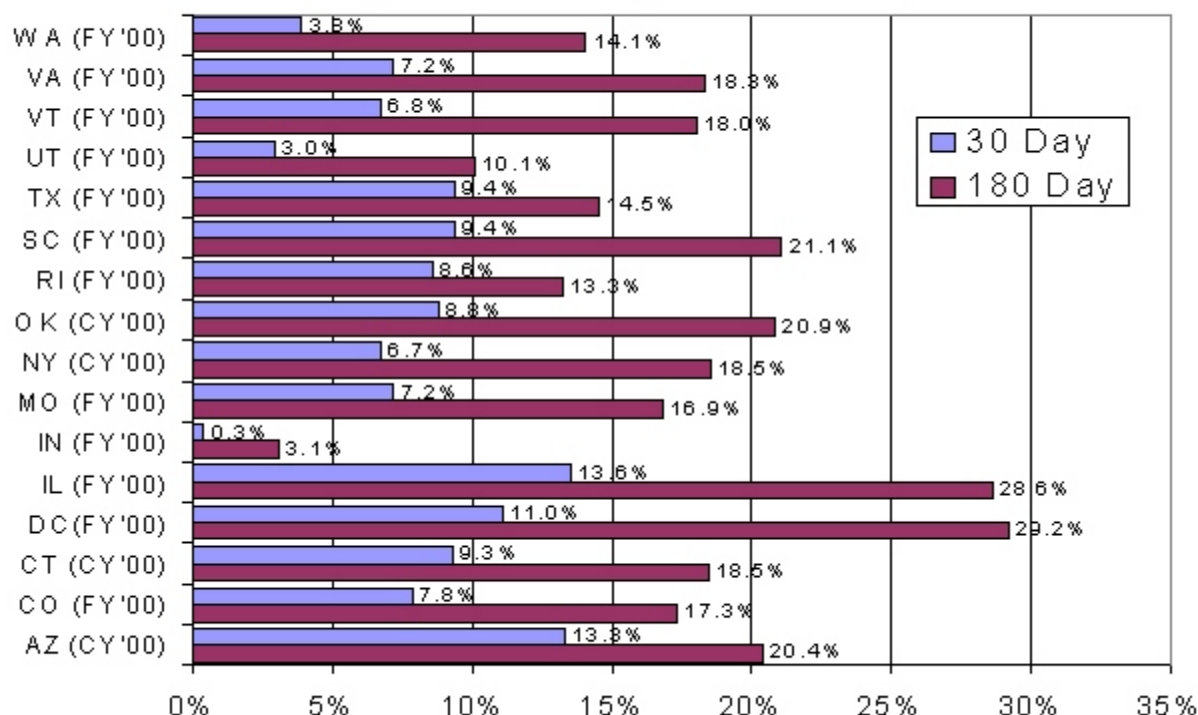
Readmission rates within 30 days were higher for adults aged 18 to 64 than for either children or older adults. Little difference in readmission was seen by gender, for 30 day readmissions, but females have higher rates of 180 day readmissions. Adults with major mental illnesses have higher rates of 180 day readmissions than adults with other diagnoses.

SOURCE/S OF INFORMATION: MIS

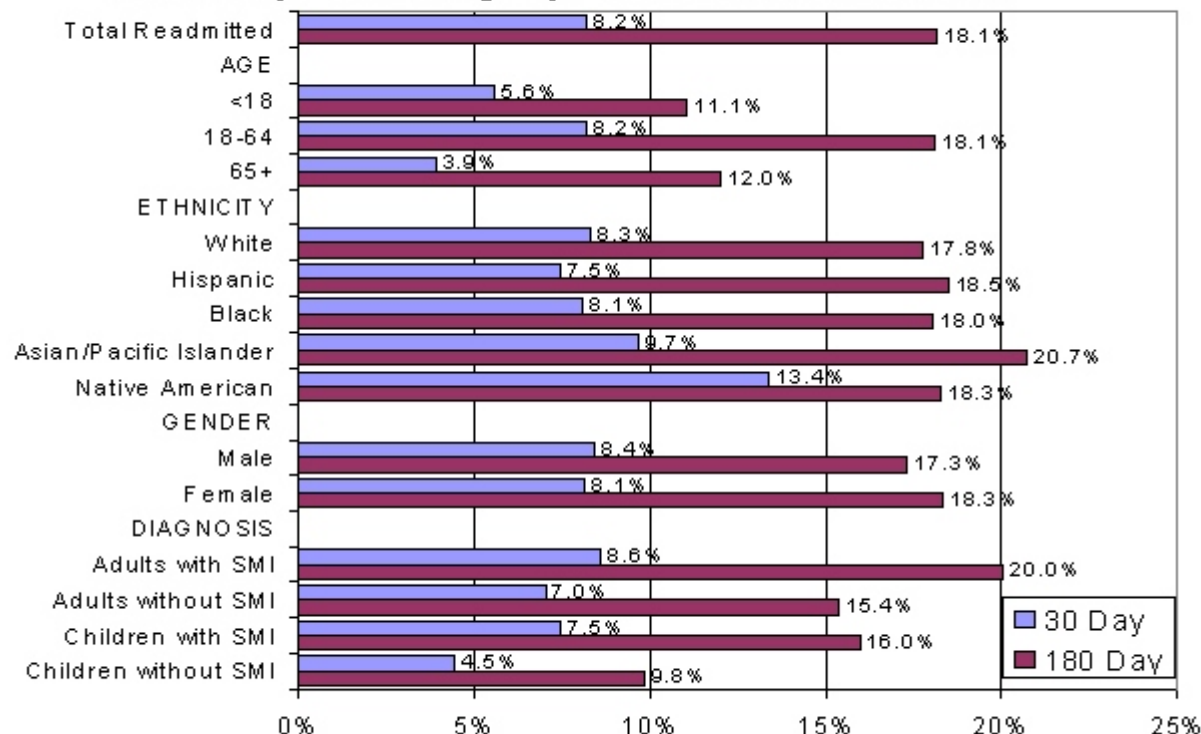
POPULATIONS:

- | | | |
|---|----------------|-------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children | |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults | ■ Geriatric |

Readmission to State Psychiatric Inpatient Units within 30 Days and 180 Days of Discharge: 2000



Median Readmissions to State Psychiatric Hospitals within 30 and 180 days of Discharge By Patient Characteristics: 2000



SETTINGS:

■ Psychiatric Inpatient Settings

☐ Community-based Settings

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Sudha A. Mehta, M.P.H.

INDICATOR: Q13 USE OF SECLUSION IN PSYCHIATRIC INPATIENT UNITS

RATIONALE FOR USE: Mental health service providers that are consumer-focused value an individual's autonomy and independence. Therefore, these providers seek to maximize the use of service modalities that are minimally, if at all, restrictive. While restrictive treatments are sometimes necessary, utilization of such treatments must be minimized and closely monitored. Overutilization of highly restrictive treatments may represent the unavailability of more appropriate, less restrictive therapies or the presence of treatment providers who lack respect for client autonomy and dignity.

APPROACH TO MEASURE: There are several ways to assess the use of restrictive interventions such as seclusion. During the study, the total time of seclusion events and the number of consumers subjected to seclusions were developed into measures. Previous studies, as well as current data, suggest that a small number of consumers who are secluded account for a disproportionate share of the total time.

In order to provide some degree of comparability, the total time of seclusion events were adjusted by the total time "at risk" for events. In this case, the time at risk was defined as the total hours all consumers were in the facility. The number of consumers who were secluded were also adjusted by the total number of consumers served during the year. The measures were calculated for a 12-month period for the unduplicated number of consumers served.

Automated client tracking and incident reporting system at the hospitals were necessary to gather consistent data for the measures. Lack of automated information systems limited the participation in some states and the level of demographic and clinical specificity of the rates in other states.

Seclusion events were defined in accordance with the specification of the NRI Behavioral Healthcare Performance Measurement System used for compliance with JCAHO accreditation requirements. This standard was adopted because the vast majority of state hospitals participate in the System, thus a consistent definition was in use by all hospitals regardless of state specific regulations.

MEASURE(S):

Measure 1: Number of hours spent in seclusion per 1,000 inpatient hours

Numerator: The total number of hours that all consumers spent in seclusion.

Denominator: Sum of the daily census (excluding consumers on leave status) for each day (client days) multiplied by 24 hours, then divided by 1000.

Measure 2: Percent of consumers secluded to total number of inpatient consumers

Numerator: The total number of consumers (unduplicated) who were secluded at least once during a reporting period.

Denominator: The total number of unduplicated consumers who were inpatients at the facility during a reporting period.

CURRENT IMPLEMENTATION STATUS: Twelve of the 16 state grantees were able to provide data for the indicators. They are Arizona, Colorado, Connecticut, Illinois, Missouri, Oklahoma, Rhode Island, Texas, Utah, Virginia, Vermont, and Washington,. Four states (Rhode Island, Utah, Colorado, and Vermont) reported FY2000 data, four states (Arizona, Virginia, Missouri, and Washington) reported FY2001 data, Texas and Illinois reported CY2000 data, Connecticut reported CY2001, and Oklahoma reported both FY2000 and FY2001 data. Capacity to produce the indicator varied widely across participating states. Oklahoma submitted data for two fiscal years while the rest of the reporting states have data for one reporting year only. Virginia was not able to provide breakdown of the data at all while Vermont was not able to provide breakdown of the data by diagnostic categories. Illinois reported totals for hours of seclusion as a percent of client hours (0.07%) and percent secluded (5%), but did not report client demographic level details.

STUDY RESULTS: The following table provides results of the two indicators for the most recent year of reporting. The appendix table provides rates for sub-groups of consumers including age, gender, race, and diagnoses.

Measure 1: The median number of hours is 0.42 per 1,000 inpatient hours, with a minimum of 0.021 and a maximum of 6.21.

Measure 2: The median percentage of consumers secluded to total number of consumers is 6.3%, with a minimum of 1.52% and a maximum of 25.74%.

	AZ	CO	CT	IL	MO	OK	RI	TX	UT	VT	VA	WA
Seclusion Hours /1000 Inpatient Hours	0.29	6.21	0.13	0.07	0.65	0.19	0.02	0.04	1.31	1.76	0.94	0.56
Percent of Consumers Secluded	17.9	25.7	6.6	5.0	6.0	1.5	3.2	2.4	14.1	21.7	4.2	7.5

The following caveats apply to the data in the preceding table:

- Data includes only state hospitals except in RI where data represent one general hospital with an inpatient psychiatric unit and one private hospital with state contracted beds.
- TX, and VA do not serve consumers in their state hospitals with a primary diagnosis of substance abuse.
- RI and VT do not serve youth in their state hospitals.
- RI does not include forensic consumers in their data.
- CT does not include forensic population and people treated for substance abuse diagnoses in their data. The CT data shown do not include information on people under 18 years?

There are noted differences in the populations served across state hospitals. Three areas particularly stand out. In some states, youth are not served in the state facility, but receive service in other settings. Additionally, some states do not serve elder adults in state facilities, but these consumers are served in other settings. In addition to restrictions on ages, some states do not serve consumers with primary substance abuse diagnoses. Finally, some states have specialized facilities for consumers on forensic status.

The number and size of the state hospitals systems vary widely across states. The number of consumers served is a function of the number of beds and the length of hospitalization. AZ, UT and VT operate one state hospital; however, both AZ and UT served three times as many consumers as VT. Both CO and WA operate two states hospitals; WA served four times as many consumers as CO.

There are few consistent patterns across states in the differences of rates across sub-populations of consumers. One general pattern that emerged was that a greater proportion of youth and young adults were subjected to seclusions than older adults and that in 6 of 9 states these consumers also had a greater number of hours in seclusion per 1000 inpatient hours than older adults. In three states (AZ, VT, WA), the proportion of female consumers secluded was notably higher than the proportion of male consumers. In these three states, the hours of seclusion per 1000 inpatient hours for females was equivalent to the hours for males in AZ, higher than those for males in VT, and lower than those for males in WA. In two states (CO, MO) the proportion of male consumers secluded was notably higher than the proportion of female consumers. The hours of seclusion per 1000 inpatient hours for males was higher than that for females in CO, but lower than that for females in MO. In many states the proportion of white consumers who were secluded was lower than the proportion of non-white consumers; there was also variation in the hours of seclusion per 1000 inpatient hours across races. Among adults, a greater proportion of consumers with major mental illness were secluded compared to adults with other disorders in five states (CT, MO, OK, RI, and TX); the hours of seclusion per 1000 inpatient hours was similar between these two groups in three of five states. A greater proportion of adult consumers with other disorders were secluded in two states (AZ, UT), and the hours of seclusion per 1000 inpatient hours was also greater for the adult consumers with other disorders. In three of four state, youth consumers with major mental illness had a smaller rate of hours of seclusion per 1000 inpatient hours than youth with other disorders.

SOURCE/S OF INFORMATION: MIS, Hospital Incident Monitoring System

POPULATIONS:

- | | | |
|---|----------------|-------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children | |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults | ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|---|
| ■ Psychiatric Inpatient Settings | <input type="checkbox"/> Community-based Settings |
|----------------------------------|---|

ISSUES:

There are variations in the types of hospitals reported. While the majority of the states reported only on the state mental hospital data, other states included private hospitals with state-contracted beds.

There are also variations in the populations served and/or reported in these data. Some states included forensic consumers, youth and elders, and consumers with substance abuse disorders; other states do not include these populations in the state facilities included in the data.

Risk adjusting the data with respect to hospital size, population composition/type, and the population demographic is highly recommended. Methodology to risk adjust the data was not available to the subgroup during the study period. Collaborating with the NRI was recommended.

Inasmuch as majority of the states report this indicator to the NRI through the Behavioral Healthcare Performance Measurement System, it was recommended that consideration be given to ensure consistent and sustained reporting of the indicator in the future. Currently, data reported for the NRI Behavioral Healthcare Performance Measurement System is used to compute monthly indicator rates; the measures reported above represent an annual assessment.

Finally, while two measures were developed for this project, additional measures may also provide useful information. It was recommended that future study of this indicator include examination of the means of physical prevention used, the average length of an 'episode' (defined as an event that begins when an individual goes into seclusion or restraint and ends when the individual is released), and better characterization of the facility being reported.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Bernadette E. Phelan (Arizona)

INDICATOR: Q14 USE OF RESTRAINTS IN PSYCHIATRIC INPATIENT UNITS

RATIONALE FOR USE: Mental health service providers that are consumer-focused value an individual's autonomy and independence. Therefore, these providers seek to maximize the use of service modalities that are minimally, if at all, restrictive. While restrictive treatments are sometimes necessary, utilization of such treatments must be minimized and closely monitored. Over-utilization of highly restrictive treatments may represent the unavailability of more appropriate, less restrictive therapies or the presence of treatment providers who lack respect for client autonomy and dignity.

APPROACH TO MEASURE: During the study, the total time of restraint events and the number of consumers subjected to restraints were developed into measures. Previous studies, as well as current data, suggest that a small number of consumers who are restrained account for a disproportionate share of the total time.

In order to provide some degree of comparability, the total time of restraint events were adjusted by the total time "at risk" for events. In this case, the time at risk was defined as the total hours all consumers were in the facility. The number of consumers who were restrained were also adjusted by the total number of consumers served during the year. The measures were calculated for a 12-month period for the unduplicated number of consumers served.

Automated client tracking and incident reporting system at the hospitals were necessary to gather consistent data for the measures. Lack of automated information systems limited the participation in some states and the level of demographic and clinical specificity of the rates in other states.

Restraint events were defined in accordance with the specification of the NRI Behavioral Healthcare Performance Measurement System used for compliance with JCAHO accreditation requirements. This standard was adopted because the vast majority of state hospitals participate in the System, thus a consistent definition was in use by all hospitals regardless of state specific regulations.

MEASURES:

Measure 1: Number of hours spent in restraint per 1,000 inpatient hours

Numerator: The total number of hours that all consumers spent in restraint during a reporting period

Denominator: Sum of the daily census (excluding consumers on leave status) for each day in a reporting period (client days) multiplied by 24 hours, then divided by 1000.

Measure 2: Percent of consumers restrained to total number of inpatient consumers

Numerator: The total number of consumers (unduplicated) who were restrained at least once during a reporting period.

Denominator: The total number of unduplicated consumers who were inpatients at the facility during the reporting period.

CURRENT IMPLEMENTATION STATUS: Eleven of the 16 state grantees were able to provide data for the indicators. They are Arizona, Connecticut, Illinois, Missouri, Oklahoma, Rhode Island, Texas, Utah, Virginia, Vermont, and Washington. Four states reported FY2001 (Arizona, Virginia, Missouri, Washington), three states reported FY2000 (Rhode Island, Utah, Vermont), Texas and Illinois reported CY2000 data, Connecticut reported CY2001, and Oklahoma reported both FY2000 and FY2001. The capacity to produce the indicator varied widely across participating states. Oklahoma submitted data for two fiscal years while the rest of the reporting states have data for one reporting year only. Virginia, Vermont and Washington were not able to provide breakdown by diagnostic categories. Illinois reported totals for hours of restraint as a percent of client hours and percent restrained but did not report client level details.

STUDY RESULTS: The following table provides results of the two indicators for the most recent year of reporting. The appendix table provides rates for sub-groups of consumers including age, gender, race, and diagnoses.

Measure 1: The median number of hours is 0.5 per 1,000 inpatient hours, with a minimum of 0.02 and a maximum of 2.44.

Measure 2: The median percentage of consumers restrained to total number of consumers is 9.97%, with a minimum of 1.02% and a maximum of 14%

	AZ	CT	IL	MO	OK	RI	TX	UT	VT	VA	WA
Restraint Hours /1000 Inpatient Hours	0.31	1.61	0.50	1.18	0.10	0.02	0.08	0.17	0.91	0.81	2.44
Percent of Consumers Restraint	12.1	11.0	14.0	7.1	1.0	6.1	5.1	10.0	13.2	3.9	12.4

The following caveats apply to the data in the preceding table:

- Data includes only state hospitals except in RI where data represent one general hospital with an inpatient psychiatric unit and one private hospital with state contracted beds.
- TX and VA do not serve consumers in their state hospitals with a primary diagnosis of substance abuse.
- RI and VT do not serve youth in their state hospitals.
- RI does not include forensic consumers in its data.
- CT does not include forensic population and people treated for substance abuse diagnoses in their data. The CT data shown do not include information on people under 18 years?
- WA includes only one of its two state hospitals

There are noted differences in the populations served across state hospitals. Three areas particularly stand out. In some states, youth are not served in the state facility, but receive service in other settings. Additionally, some states do not serve elder adults in state facilities, but these consumers are served in other settings. In addition to restrictions on ages, some states do not serve consumers with primary substance abuse diagnoses. Finally, some states have specialized facilities for consumers on forensic status.

The number and size of the state hospitals systems vary widely across states. The number of consumers served is a function of the number of beds and the length of hospitalization. AZ, UT and VT operate one state hospital; however, both AZ and UT served three times as many consumers as VT.

There are few consistent patterns across states in the differences of rates across sub-populations of consumers. One general pattern that emerged was that a greater proportion of youth and young adults were subjected to restraints than older adults and that these consumers have more hours of restraint per 1000 inpatient hours than older adults. In four states (AZ, MO, UT, VT), the proportion of female consumers restrained was notably higher than the proportion of male consumers. In these four states, the hours of restraint per 1000 inpatient hours for females was higher than the hours for males in AZ, MO, and VT; and slightly higher than those for males in UT. In many states the proportion of white consumers who were restrained was lower than the proportion of non-white consumers; there was also variation in the hours of restraint per 1000 inpatient hours across races. Among adults, a lesser proportion of consumers with major mental illness were restrained compared to adults with other disorders in four states (AZ, RI, UT, and WA); the hours of restraint per 1000 inpatient hours was similar between these two groups in all four states. A greater proportion of adult consumers with major mental illness were restrained in MO and only a slight difference (within one percent) for OK and TX, and the hours of restraint per 1000 inpatient hours was slightly greater for the adult consumers with major mental illness in OK, and less for MO and TX.

SOURCE/S OF INFORMATION: MIS, Hospital Incident Monitoring System

POPULATIONS:

- | | |
|---|-------------------------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|---|
| ■ Psychiatric Inpatient Settings | <input type="checkbox"/> Community-based Settings |
|----------------------------------|---|

ISSUES: Time should be spent to understand the inability of other states to report the data. Identification of appropriate technical assistance needs of each state should be conducted to assess their capacity to implement this indicator. And it is also advisable to determine the state's readiness in reporting the indicator using the state's level of automation in data collection as a measure.

There are variations in the types of hospitals reported. While the majority of the states reported state mental hospital data only, other states included private hospitals with state-contracted beds.

There are variations in the composition of populations covered. Some states included forensic consumers, youth and elders, and consumers with substance abuse disorders; other states do not include these populations in the state facilities included in the data. Although majority of the states have the ability to report both children and adult population, two states serve adult population only in the state hospitals.

Risk adjusting the data with respect to hospital size, population composition/type, and the population demographic is highly recommended. Methodology to risk adjust the data was not

available to the subgroup during the study period. Collaborating with the NRI was recommended.

Inasmuch as majority of the states report this indicator to the NRI through the Behavioral Healthcare Performance Measurement System, it was recommended that MHSIP and NRI establish a collaborative process to ensure consistent and sustained reporting of the indicator in the future. Currently, data reported for the NRI Behavioral Healthcare Performance Measurement System is used to compute monthly indicator rates; the measures reported above represent an annual assessment.

Finally, while two measures were developed for this project, additional measures may also provide useful information. It was recommended that future study of this indicator include examination of the purpose/s of restraint used, type of restraint used, restraint devices used, and the average length of time spent in restraint.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Bernadette E. Phelan (Arizona)

INDICATOR: Q15 MEDICATION ERRORS

RATIONALE FOR USE: A critical component of the treatment of mentally ill consumers, particularly those consumers with severe and persistent illness is pharmacotherapy. If appropriately prescribed, distributed, administered and monitored, pharmacotherapy can produce significant improvement in symptoms. However, if inappropriately prescribed, distributed, administered, or monitored, medications can be associated with significant harm or death to the client. Given the relatively high incidence of medication use among psychiatric consumers and the high potential for adverse outcomes of medication-related errors, tracking of such errors and subsequent identification of causal factors is an essential component of the performance improvement process in organizations providing psychiatric health care.

APPROACH TO MEASURE: In order to provide some degree of comparability, the total number of medication errors were adjusted by a duplicated count of consumers served during the year. A duplicated count of client is used to represent that during every episode of hospitalization consumers are at risk for incidents. The measure was calculated for the duplicated number of consumers served during a 12-month period.

Automated client tracking and incident reporting system at the hospitals were necessary to gather consistent data for the measure. Lack of automated information systems limited the participation in some states and the level of demographic and clinical specificity of rates in other states.

Medication errors were defined in accordance with the specification of the NRI Behavioral Healthcare Performance Measurement System used for compliance with JCAHO accreditation requirements. This standard was adopted because the vast majority of state hospitals participate in the System, thus a relatively consistent definition was in use by all hospitals regardless of state specific regulations. It should be noted that the NRI Behavioral Healthcare Performance Measurement System is currently studying several alternative mechanisms to define and track medication errors.

MEASURE(S): Number of Medication Errors per 1000 Inpatient Consumers

Numerator: Total number of medication errors occurring in an inpatient stay during the reporting period.

Denominator: The sum of the total number of consumers on the inpatient census at the end of the reporting period, the total number of discharges during the reporting period and the total number of deaths occurring during the reporting period (duplicated count), then divided by 1000.

CURRENT IMPLEMENTATION STATUS: Five of the 16 state grantees were able to provide data. They are Connecticut, Missouri, Rhode Island, Vermont, and Washington. Rhode Island and Vermont reported FY2000 data, Connecticut reported CY2001 data, and Missouri and Washington reported FY2001 data.

STUDY RESULTS: The following table provides summary results for these five states for the number of medication errors per 1000 inpatient consumers. The appendix table provides rates for sub-groups of consumers including age, gender, race, and diagnoses. The median number

of errors is 81.2 per 1,000 inpatient consumers, with a minimum of 36.3 and a maximum of 459.26.

	CT	MO	RI	VT	WA
Medication errors/1000 inpatient consumers	36.33	81.22	51.80	459.26	164.94

The following caveats apply to the data in the preceding table:

- Data includes only state hospitals except in RI where data represent one general hospital with an inpatient psychiatric unit and one private hospital with state contracted beds.
- RI and VT do not serve youth in their state hospitals.
- RI does not include forensic consumers in data.
- CT does not include forensic population and people treated for substance abuse diagnoses in their data. The CT data shown do not include information on people under 18 years?
- MO includes complete data for 8 facilities and partial data for one facility the fiscal year.
- WA includes adult populations only.

Only one state (MO) included youth in the above calculations. Specific comparisons across states should take into account this limitation. Additionally, one state (VT) was not able to provide separate rates for different sub-groups of consumers.

Consistent patterns shared by the states are limited. Four states provide information for specific sub-groups of consumers. Among adult consumers, the number of medication errors per 1000 inpatient consumers was generally higher for older age groups. In three states the incidence was higher among female consumers than male consumers. In three states the incidence was higher for white consumers than consumers of any other race group. In two states the incidence was lower for adults with serious mental illness than adults with other disorders, while the other two states had the opposite pattern.

SOURCE/S OF INFORMATION: MIS, Hospital Incident Monitoring System

POPULATIONS:

- Children with a Serious Emotional Disturbance
- Adults w/ a Serious Mental Illness
- All Children
- All Adults
- Geriatric

SETTINGS:

- Psychiatric Inpatient Settings
- Community-based Settings

ISSUES: There are some variations in the types of hospitals and populations served and/or reported in these data. The majority of the states reported only on the state mental hospital data; however, one state included private hospitals with state-contracted beds. Some states included forensic consumers, youth and elders, and consumers with substance abuse disorders; other states do not include these populations in the state facilities included in the data.

Risk adjusting the data with respect to hospital size, population composition/type, and the population demographic is highly recommended. Methodology to risk adjust the data was not

available to the subgroup during the study period. Collaborating with the NRI was recommended.

Inasmuch as the majority of the states participate in the NRI Behavioral Healthcare Performance Measurement System, it was recommended that consideration be given to ensure consistent and sustained reporting of the indicator in the future. Currently, data reported for the NRI Behavioral Healthcare Performance Measurement System is used to compute monthly indicator rates; the measures reported above represent an annual assessment.

Finally, it was recommended that future study of this indicator include examination of the medication error types and severity. A comparison of medication errors between state-operated mental hospital and private community hospitals where states have contracted beds may also provide an interesting insight.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Bernadette E. Phelan (Arizona)

INDICATOR: Q16-C**CULTURAL SENSITIVITY OF PROVIDERS FOR CHILDREN AND ADOLESCENTS**

RATIONALE FOR USE: While the MHSIP consumer survey was developed with a general population receiving services as respondents, many of the special concerns related to children's and family members' perspectives were not addressed. This resulted in an initiative sponsored by the 16-State Study to develop an appropriate perception of care survey for children's services.

APPROACH TO MEASURE: The Children's Indicators Workgroup recognized the need to develop and test a MHSIP- like consumer survey focused on the special treatment and life needs of children and adolescents. Ultimately, the workgroup designed two different survey's one for to be completed by adolescents and a second version to be completed by the parents of younger children. Building on the experiences of the developers of the adult MHSIP consumer survey and the instruments used in the CMHS Comprehensive Community Mental Health Service for Children and their Families Program, the workgroup identified 26 items scored on a five-point, Likert-type scale for inclusion in the surveys. These items were designed to measure the domains of access, appropriateness, outcomes, and satisfaction. For this population "appropriateness" included family involvement and cultural sensitivity. In addition, there were several items that assessed specific behavioral outcomes (e.g. out-of-home placement).

- **Developed the Youth Services Survey (YSS) and its counterpart, the Youth Services Survey for Families (YSS-F).** These surveys were designed to provide a means of collecting standardized information on domains similar to those measured by the MHSIP Consumer Survey but focusing on issues more relevant to children and their families. The YSS can be completed by youth age 13 years and older. Caregivers of the child consumer complete the YSS-F.
- **Conducted a survey to determine states' interest and ability to collect additional outcome information.** This information is needed for recommended indicators on school attendance, out of home placement, and juvenile justice involvement.
- **Developed recommendations and guidelines for states to use in collecting and reporting performance indicators for children's mental health.** "Guidelines for the YSS and YSS-F" can be found at <http://www.mhsip.org/surveylink.htm>.

By the end of the project's reporting period, 10 of the 14 state mental health agencies that serve youth had implemented at least one of the surveys. Seven states surveyed both caregivers and youth, two states collected the YSS-F only, and one state collected only the YSS. The majority of states used a sample that was representative at the state level. In addition to the states participating in the 16-State Study, the YSS and YSS-F have been used in at least four other states to assess consumer perceptions of their public mental health services. One of the additional states, Kentucky, contributed its data to the project.

A more detailed description related to the development of the children's surveys (one for the child/adolescents' perspectives, the other for the family members' perspective) is provided in the workgroup report.

MEASURE(S): The important aspect is to obtain the consumer perspective on the impact of the services received through a confidential, self-report mechanism. A consumer survey for the families of children and/or for adolescents to complete themselves is recommended.

The expectation is that an annual, cross-sectional survey of consumers be conducted that includes an assessment of consumers' perception of the outcome of services. It is recommended that the Youth Services Survey be used for adolescents over the age of 13, and the Youth Services Survey for Families (YSS-F) be used for younger children. If one of the YSS surveys are used, perception of the access to services will be measured by responses to the following items:

Cultural Sensitivity:

- Staff treated me with respect.
- Staff respected my family's religious/spiritual beliefs.
- Staff spoke with me in a way that I understood.
- Staff were sensitive to my cultural/ethnic background.

Scoring:

1. Exclude respondents with 3 or more missing values.
2. Calculate the mean of the items for each respondent.
3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree).

Numerator: Total number of respondents with an average scale score > 3.5.

Denominator: Total number of respondents.

CURRENT IMPLEMENTATION STATUS: By the end of the project's reporting period, 10 of the 14 state mental health agencies that served youth had implemented at least one of the surveys. Seven states surveyed both caregivers and youth, two states collected the YSS-F only, and one state collected only the YSS. The majority of states used a sample that was representative at the state level. In addition to the states participating in the Sixteen State Indicator Project, the YSS and YSS-F have been used in at least four other states to assess consumer perceptions of their public mental health services. One of the additional states, Kentucky, contributed its data to the project. Overall results are presented below.

Table 1. Performance Indicators Based on Family Surveys

	YSS		YSS-F	
	N	Percent	N	Percent
Good Access to Services	225	68	1542	73.8
Participation in Treatment	574	58	1539	72.8
Cultural Sensitivity of Staff	226	77.9	1539	82.3
Satisfaction with Services	225	65.3	1541	64.1
Positive Outcome of Service	582	56.7	1538	45.6

STUDY RESULTS: Table 2 below, shows results from the pilot survey for both the youth self-report survey and the parent survey. Caution should be give to interpreting these pilot study results, due to the small numbers of respondents in many consumer characteristics. CO, KY, OK, TX, VT, and VA all participated in the pilot study. In addition to the pilot states, DC, IN,

NY, UT, and WA all have completed collection of data using either the YSS-F or YSS surveys. The data from these 5 additional states are not included in Table 3 below.

16 State Study Pilot: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F) Results: Cultural Sensitivity									
Demographic Breakdown	YSS		YSS-F		Youth Characteristics ³	YSS		YSS-F	
	N	Percent ²	N	Percent ²		N	Percent ²	N	Percent ²
TOTAL	226	77.9%	1,539	82.3%					
Gender					Court involved last 6 months				
Male	105	76.9%	969	80.8%	Yes	49	83.7%	213	82.2%
Female	117	77.6%	532	85.3%	No	176	75.9%	1,286	82.2%
Unknown	7	100.0%	38	76.3%	Unknown	4		40	85.0%
Race					Absent from school last month				
American Indian/Alaskan Native	15	53.3%	35	65.7%	Yes	104	76.9%	445	84.3%
White	115	79.1%	962	82.3%	No	90	82.2%	507	85.2%
Black	36	80.0%	342	83.9%	Unknown	32	67.7%	587	78.2%
Asian/Pacific Islander	---	---	2		On psychotropic meds				
Other	50	84.0%	164	82.9%	Yes	121	77.5%	1,013	82.6%
Unknown	12	60.0%	34	82.4%	No	103	77.5%	493	81.9%
Hispanic ³					Unknown	5		33	75.8%
Yes	68	80.9%	167	84.9%	Currently in service				
No	146	75.2%	1,286	82.3%	Yes	125	83.1%	1,105	85.6%
Unknown	15	92.3%	90	77.0%	No	95	70.5%	373	74.0%
Age					Unknown	8	85.7%	61	72.1%
0 - 3	---	---	7	100.0%	Currently living at home				
4 - 12	17	75.0%	903	81.4%	Yes	170	76.8%	1,399	82.8%
13 - 17	133	76.9%	547	84.8%	No	52	78.8%	103	75.7%
18 and older	9	66.7%	35	65.7%	Unknown	7	100.0%	37	81.1%
Unknown	30	89.3%	47	78.7%					
Medicaid									
Yes	126	80.2%	1,092	82.3%					
No	86	76.5%	394	82.0%					
Unknown	17	66.7%	53	83.0%					

¹ Cultural sensitivity of provider defined as average score on questions 21, 23, 24 & 25 > 3.5. Cases with 3 or more missing values excluded.

² Percent of respondents in each category who met criteria for this indicator.

³ Data element not collected by VT, therefore, VT cases excluded from analysis of the Hispanic variable and all Youth Characteristics.

SOURCES OF INFORMATION: Consumer Survey: recommended measure: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F).

POPULATIONS:

- ☒ Children with a Serious Emotional Disturbance
- ☐ Adults w/ a Serious Mental Illness
- ☒ All Children
- ☐ All Adults
- ☐ Geriatric

SETTINGS:

- ☐ Psychiatric Inpatient Settings
- ☒ Community-based Settings

ISSUES: Two surveys (YSS and YSS-F) have been developed to assess perceptions of the quality of mental health services provided to youth. These surveys can be found at <http://www.mhsip.org/surveylink.htm>. Data obtained through the Sixteen State Indicator Project indicates that the surveys reliably measure constructs of access to services, participation in treatment, cultural sensitivity of staff, satisfaction with services, and outcomes. In addition, several other items on the surveys will facilitate the evaluation of mental health services on other important indicators of performance.

While this project has made great strides toward specifying and standardizing some critical performance measures for children's mental health services, the workgroup hopes to continue working to expand our knowledge and improve the tools to measure performance in this area. Future efforts will compare telephone survey vs. mail survey methodologies, evaluate the usefulness of these indicators in evaluating performance over time, and examine the effects of risk adjustment on the children's performance indicators.

To assure comparability among survey results, not only must similar surveys be used, but the populations covered, the sampling methodologies used and the administration of the survey should also be comparable across states.

The Workgroup also explored the addition of new questions to the YSS and YSS-F to provide information needed for other child and adolescent indicators in the NASMHPD Framework. The proposed YSS and YSS-F include additional questions needed to calculate indicators related to "links to physical health services", "Out-of-home placements", "percentage of youth living in family like settings", and "use of therapeutic foster care services".

Finally, efforts are being made to collaborate with developers of the ECHO surveys. This workgroup has a commitment to reach consensus on a single instrument or set of items that can be used to evaluate mental health services in both the private and public sectors.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Molly Brunk and Randy Koch (Virginia)

INDICATOR: O1-A ADULT CONSUMER PERCEPTION OF POSITIVE CHANGE AS A RESULT OF SERVICES.

RATIONALE FOR USE: This indicator is the most direct measure of the consumer's perception of the effectiveness of services and the positive outcomes that resulted from treatment and support received.

APPROACH TO MEASURE: An approach to assessing the positive outcomes resulting from treatment and supports provided is to ask the consumer: What difference did treatments and supports make?

The items comprising the outcome domain in the MHSIP consumer survey were used to assess the consumers perception of outcomes. The items are based on concerns related to this domain identified by consumers. These include: the consumer's perception of improved ability to deal with daily problems and crisis situations, improved social relationships and functioning, and improvements in the school/work context.

These items are part of a larger survey that is usually conducted on a sample of adults who received services during a specified time period. The methodology of administration has varied across states, where some persons have used mail surveys and others have used face-to-face surveys. (While some studies suggest that differences in response rates are not significant, others suggest that there may be systematic difference based on administration methodology.) Also the populations covered and the samples selected varied considerably across states.

Survey results were for adults (age 18 and older) and did not include persons with single diagnosis substance abuse. However, some states, by nature of their mandate included only persons with serious mental illness while others included a broader population. Comparisons across states without taking into account such differences are therefore questionable.

MEASURE(S): The important aspect is to obtain the consumer perspective on the impact of the services received through a confidential, self-report mechanism. A consumer survey is recommended.

The expectation is that an annual, cross-sectional survey of consumers be conducted that includes an assessment of consumers' perception of the outcome of services. Given the widespread use of the MHSIP Consumer Survey by public mental health systems and consideration being given to its adoption by the private sector, it is recommended that this instrument be used. If the MHSIP Consumer Survey is used, perception of the outcomes of services will be measured by responses to the following items:

1. I deal more effectively with daily problems.
2. I am better able to control my life.
3. I am better able to deal with crisis.
4. I am getting along better with my family.
5. I do better in social situations.
6. I do better in school and/or work.
7. My symptoms are not bothering me as much.

Scoring:

1. Recode ratings of "not applicable" as missing values.
2. Exclude respondents with more than 1/3rd of the items missing.
3. Calculate the mean of the items for each respondent.
4. Calculate the percent of scores less than 2.5. (percent agree and strongly agree).

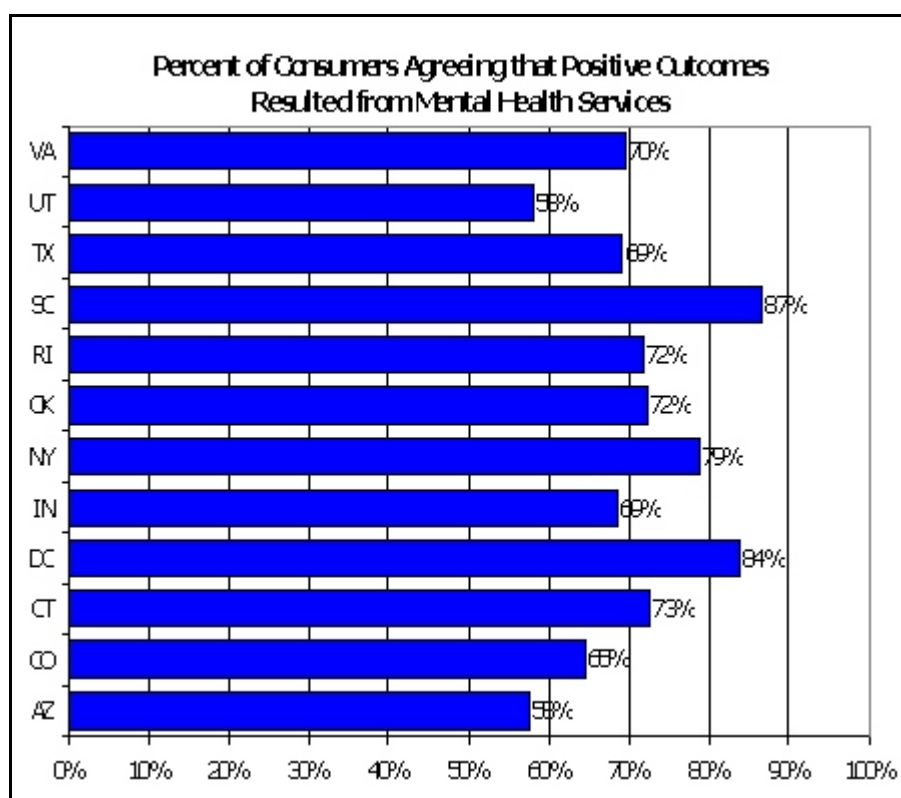
Numerator: Total number of respondents with an average scale score < 2.5.

Denominator: Total number of respondents. (Please note that the results of the consumer survey may differ from those published by individual states because the common computational methodology for this study may be different from what individual states use. Individual states may also use different items in their calculations.)

CURRENT IMPLEMENTATION STATUS: Many of the states participating in the 16-State Study are implementing a version of the MHSIP Consumer Survey. Twelve of the study states submitted consumer survey data needed to calculate this indicator. Results in the states ranged from a low of 58% agreeing they had good outcomes as a direct result of treatment, to a high of 87%.

STUDY RESULTS

State	Percent Agreeing
AZ (1999)	58%
CO (2000)	65%
CT (2001)	73%
DC (2000)	84%
IN (2001)	68%
NY (1998)	79%
OK (1999)	72%
RI (2000)	72%
SC (2001)	60%
TX (2000)	69%
UT (2000)	58%
VA (2000)	70%
VT (2001)	59%



There did not appear to be any systematic significant differences by age, gender or ethnicity on perception of access. These data are available in greater detail in the workgroup report on the consumer survey. Many of the states participating in the 16-State Study are implementing a version of the MHSIP Consumer Survey.

SOURCE/S OF INFORMATION: Consumer Survey: recommended measure: MHSIP Consumer Survey -- short or long versions.

POPULATIONS:

- | | |
|--|--|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input checked="" type="checkbox"/> All Adults <input checked="" type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|--|--|

ISSUES: The major issue related to these data are that they are not comparable. The populations covered, the sampling methodologies used and the administration of the survey varied considerably across states. As the workgroup report indicates, some states reported on Medicaid consumers, others used one site. Even though most used a statewide sample, in some states staff handed out the survey, others had drop boxes while others had more rigorous methodologies. Sampling methodologies were also diverse, many states used convenience samples. This diversity results in the inability to have useful benchmarks on perception of access across states.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Judy Hall (Washington)

INDICATOR: 01-C CHILDREN AND ADOLESCENT PERCEPTION OF OUTCOMES

RATIONALE FOR USE: While the MHSIP consumer survey was developed with a general population receiving services as respondents, many of the special concerns related to children's and family members' perspectives were not addressed. This resulted in an initiative sponsored by the 16-State Study to develop an appropriate perception of care survey for children's services.

APPROACH TO MEASURE: The Children's Indicators Workgroup recognized the need to develop and test a MHSIP- like consumer survey focused on the special treatment and life needs of children and adolescents. Ultimately, the workgroup designed two different survey's one for to be completed by adolescents and a second version to be completed by the parents of younger children. Building on the experiences of the developers of the adult MHSIP consumer survey and the instruments used in the CMHS Comprehensive Community Mental Health Service for Children and their Families Program, the workgroup identified 26 items scored on a five-point, Likert-type scale for inclusion in the surveys. These items were designed to measure the domains of access, appropriateness, outcomes, and satisfaction. For this population "appropriateness" included family involvement and cultural sensitivity. In addition, there were several items that assessed specific behavioral outcomes (e.g. out-of-home placement).

- **Developed the Youth Services Survey (YSS) and its counterpart, the Youth Services Survey for Families (YSS-F).** These surveys were designed to provide a means of collecting standardized information on domains similar to those measured by the MHSIP Consumer Survey but focusing on issues more relevant to children and their families. The YSS can be completed by youth age 13 years and older. Caregivers of the child consumer complete the YSS-F.
- **Conducted a survey to determine states' interest and ability to collect additional outcome information.** This information is needed for recommended indicators on school attendance, out of home placement, and juvenile justice involvement.
- **Developed recommendations and guidelines for states to use in collecting and reporting performance indicators for children's mental health.** "Guidelines for the YSS and YSS-F" can be found at <http://www.mhsip.org/surveylink.htm>.

By the end of the project's reporting period, 10 of the 14 state mental health agencies that serve youth had implemented at least one of the surveys. Seven states surveyed both caregivers and youth, two states collected the YSS-F only, and one state collected only the YSS. The majority of states used a sample that was representative at the state level. In addition to the states participating in the 16-State Study, the YSS and YSS-F have been used in at least four other states to assess consumer perceptions of their public mental health services. One of the additional states, Kentucky, contributed its data to the project.

Five states participated in the initial survey effort. Factor analyses resulted in five factors: Satisfaction, Outcomes, Cultural Sensitivity, Family Involvement in Treatment, and Access.

A more detailed description related to the development of the children's surveys (one for the child/adolescents' perspectives, the other for the family members' perspective) is provided in the workgroup report.

MEASURE(S): The important aspect is to obtain the consumer perspective on the impact of the services received through a confidential, self-report mechanism. A consumer survey for the families of children and/or for adolescents to complete themselves is recommended.

The expectation is that an annual, cross-sectional survey of consumers be conducted that includes an assessment of consumers' perception of the outcome of services. It is recommended that the Youth Services Survey be used for adolescents over the age of 13, and the Youth Services Survey for Families (YSS-F) be used for younger children. If one of the YSS surveys are used, perception of the outcomes of services will be measured by responses to the following items:

Positive Outcomes of Services:

- My child is better at handling daily life.
- My child gets along better with family members.
- My child gets along better with friends and other people.
- My child is doing better in school and/or work.
- My child is better able to cope when things go wrong.
- I am satisfied with our family life right now.

Scoring:

1. Exclude respondents with 4 or more missing values.
2. Calculate the mean of the items for each respondent.
3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree).

Numerator: Total number of respondents with an average scale score > 3.5.

Denominator: Total number of respondents.

CURRENT IMPLEMENTATION STATUS: By the end of the project's reporting period, 10 of the 14 state mental health agencies that served youth had implemented at least one of the surveys. Seven states surveyed both caregivers and youth, two states collected the YSS-F only, and one state collected only the YSS. The majority of states used a sample that was representative at the state level. In addition to the states participating in the Sixteen State Indicator Project, the YSS and YSS-F have been used in at least four other states to assess consumer perceptions of their public mental health services. One of the additional states, Kentucky, contributed its data to the project. Overall results are presented below.

Table 1. Performance Indicators Based on Family Surveys

	YSS		YSS-F	
	N	Percent	N	Percent
Good Access to Services	225	68	1542	73.8
Participation in Treatment	574	58	1539	72.8
Cultural Sensitivity of Staff	226	77.9	1539	82.3
Satisfaction with Services	225	65.3	1541	64.1
Positive Outcome of Service	582	56.7	1538	45.6

STUDY RESULTS: Table 2 below, shows results from the pilot survey for both the youth self-report survey and the parent survey. Caution should be given to interpreting these pilot study results, due to the small numbers of respondents in many consumer characteristics. CO, KY, OK, TX, VT, and VA all participated in the pilot study. In addition to the pilot states, DC, IN, NY, UT, and WA all have completed collection of data using either the YSS-F or YSS surveys. The data from these 5 additional states are not included in Table 3 below.

16 State Study Pilot: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F) Results: Perception of Outcomes:									
Demographic Breakdown	YSS		YSS-F		Youth Characteristics ³	YSS		YSS-F	
	N	Percent ²	N	Percent ²		N	Percent ²	N	Percent ²
TOTAL	582	56.7%	1,538	45.6%					
Gender					Court involved last 6 months				
Male	283	59.6%	969	44.3%	Yes	49	51.0%	214	35.5%
Female	297	54.1%	531	47.6%	No	176	54.3%	1,283	47.2%
Unknown	7	50.0%	38	50.0%	Unknown	4		41	48.8%
Race					Absent from school last month				
American Indian/Alaskan Native	16	37.5%	34	44.1%	Yes	104	52.9%	444	41.4%
White	371	56.6%	958	46.1%	No	93	59.8%	509	55.0%
Black	40	52.5%	345	41.4%	Unknown	32	40.6%	585	40.5%
Asian/Pacific Islander	---	---	2	0.0%	On psychotropic meds				
Other	50	56.0%	165	51.5%	Yes	121	52.1%	1,014	42.2%
Unknown	109	62.3%	34	44.1%	No	103	55.9%	490	53.3%
Hispanic ³					Unknown	5		34	35.3%
Yes	68	52.9%	167	56.3%	Currently in service				
No	146	53.4%	1,283	44.3%	Yes	125	56.0%	1,101	46.4%
Unknown	15	64.3%	90	44.3%	No	96	50.5%	372	43.8%
Age					Unknown	8	62.5%	65	41.5%
0 - 3	---	---	7	42.9%	Currently living at home				
4 - 12	17	58.8%	901	46.2%	Yes	170	56.2%	1,396	46.5%
13 - 17	493	57.5%	546	45.2%	No	52	46.2%	102	35.3%
18 and older	47	51.1%	35	42.9%	Unknown	7	57.1%	40	40.0%
Unknown	30	51.7%	49	40.8%					
Medicaid									
Yes	484	56.9%	1,088	42.7%					
No	86	58.1%	397	52.9%					
Unknown	17	43.8%	53	49.1%					

¹ Positive outcome defined as average score on questions 2 through 7 > 3.5. Cases with 4 or more missing values excluded.

² Percent of respondents in each category who met criteria for this indicator.

³ Data element not collected by VT, therefore, VT cases excluded from analysis of the Hispanic variable and all Youth Characteristics.

SOURCE/S OF INFORMATION: Consumer Survey: recommended measure: Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F).

POPULATIONS:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Children with a Serious Emotional Disturbance | <input checked="" type="checkbox"/> All Children |
| <input type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|---|--|
| <input type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|---|--|

ISSUES: Two surveys (YSS and YSS-F) have been developed to assess perceptions of the quality of mental health services provided to youth. These surveys can be found at <http://www.mhsip.org/surveylink.htm>. Data obtained through the 16-State Study indicates that the surveys reliably measure constructs of access to services, participation in treatment, cultural sensitivity of staff, satisfaction with services, and outcomes. In addition, several other items on

the surveys will facilitate the evaluation of mental health services on other important indicators of performance.

While this project has made great strides towards specifying and standardizing some critical performance measures for children's mental health services, the workgroup hopes to continue working to expand our knowledge and improve the tools to measure performance in this area. Future efforts will compare telephone survey vs. mail survey methodologies, evaluate the usefulness of these indicators in evaluating performance over time, and examine the effects of risk adjustment on the children's performance indicators.

To assure comparability among survey results, not only must similar surveys be used, but the populations covered, the sampling methodologies used and the administration of the survey should also be comparable across states.

The Workgroup also explored the addition of new questions to the YSS and YSS-F to provide information needed for other child and adolescent indicators in the NASMHPD Framework. The proposed YSS and YSS-F include additional questions needed to calculate indicators related to "links to physical health services", "Out-of-home placements", "percentage of youth living in family like settings", and "use of therapeutic foster care services".

Finally, efforts are being made to collaborate with developers of the ECHO surveys. This workgroup has a commitment to reach consensus on a single instrument or set of items that can be used to evaluate mental health services in both the private and public sectors.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Molly Brunk and Randy Koch (Virginia)

INDICATOR: 02 SCHOOL IMPROVEMENT: CHILDREN AND ADOLESCENTS

RATIONALE FOR USE: From a societal perspective, the impact of mental illness and mental health treatment on school attendance and performance are major issues. The technical workgroup recognized that school attendance and school performance are not determined solely by the mental health services received and that mental health service providers can not be held responsible for school performance. However, this is a critical objective for such services and mental health services should have some impact. This was considered an important outcome to track.

APPROACH TO MEASURE: Various measures of school performance can be used: school attendance, school performance, behavior problems. As an outcome measure, a longitudinal approach monitoring change for an individual is recommended but cross-sectional approaches can be used. Measures of school attendance - while not necessarily ideal - were considered less burdensome.

The Children's Workgroup of the 16-State Study has surveyed participating states regarding several potential measures related to the impact of mental health services on school.

1. Percentage of consumers enrolled in school whose absence rate is equal to or less than 10% for the last 30 calendar days. Measured at 6 months and 12 months post admission.
2. Average change in the percentage of available school days attended from admission to 6 (12) months post admission. (negative change indicates decline in school performance and a positive change indicates improvement)
3. Absence rate is defined as number of days absent in last 30 days divided by number of available school days.
4. Percentage of youth who show improvement in absence rate. Absence rate is defined as number of days absent in last 30 days divided by number of available school days.

The Children's Workgroup developed two items in the Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F) that gather information related to school improvement. First, there is a question in the main survey asking families and adolescents to self report on: "As a direct result of services I received, I am doing better in school or work". Second, Question 32 was added, to compile information on the number of days a child/adolescent was absent from school during the last month.

MEASURE(S): Number of Days Absent from School in Last 30 days, as a percentage of available school days

Numerator: Sum across all consumers 6 – 17 years old enrolled in school (Absence rate at admission minus Absence rate from school during last 30 days)

Denominator: Total number of consumers 6 - 17 years old enrolled in school

CURRENT IMPLEMENTATION STATUS: The Children's Workgroup has found that although states reported these indicators to be of very high utility, that very few states can currently report necessary data for these indicators. Therefore, the Workgroup added the questions

discussed above to the YSS and YSS-F survey instruments. The Workgroup pilot tested the survey's during the 16-State Study, but did not report indicator results for this measure.

SOURCE/S OF INFORMATION: Consumer/family member report obtained through the YSS or YSS-F Survey, Official school records

POPULATIONS:

- | | | |
|---|--|------------------------------------|
| <input checked="" type="checkbox"/> Children with a Serious Emotional Disturbance | <input checked="" type="checkbox"/> All Children | |
| <input type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults | <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|--|--|

ISSUES:

- Standard for attendance rate should be based on national average for entire student population.
- Must have a method for handling situations in which no or a small number of school days are available.
- This is a distal outcome which is determined by several factors outside the control of the mental health system.
- See the discussion included in indicators O2-C or A2-C for a discussion of the development and use of the YSS and YSS-F.

WORKGROUP CHAIR: Molly Brunk and Randy Koch (Virginia)

INDICATOR: 03 EMPLOYMENT STATUS AND CHANGE IN EMPLOYMENT AFTER SERVICES

RATIONALE FOR USE: For many mental health consumers and payers for treatment, helping consumers who choose to work, to obtain and hold paid jobs is an important goal, or even the ultimate “so what?” Productive activity is an important component of role functioning for adults. Clearly, the employment status and increase in employment rates of mental health consumers is a distal outcome which is determined by several factors, some of which are outside the control of the mental health system. Monitoring this indicator for populations with mental illness, however, is critical.

As in the case of school performance for children and adolescents, mental health service providers can not be held responsible for employment. However, this is a critical objective and mental health services should have some impact. This was considered a critical outcome to track.

APPROACH TO MEASURE: The ultimate goal is to calculate an outcome indicator of change in employment over time. Although two different approaches to measuring employment outcomes were proposed in the workgroup, it was determined that the first step should be to focus on definitions and compiling information on current employment status. Unduplicated adults between 18 and 64 years of age served in community mental health settings were selected as the target group for study.

MEASURE(S):

Employment Status: What percentage of non-duplicated consumers 18 to 64 years of age that received one or more public community mental health service in state FY2000 were competitively employed (either full or part time) at their last assessment?

Numerator: The number of unduplicated consumers 18-64 years of age that received one or more public community mental health services in state fiscal year 2000 (latest assessment for multiple admissions) that worked on a full- or part-time basis for which they were compensated in accordance with the Fair Labor Standards Act. A person in the military is included, but competitively-employed, supported, or transitional persons are excluded from the numerator. The numerator for the variables gender, age groups, race/ethnicity, diagnosis, and type of mental illness is the number of unduplicated persons served in each category (e.g., female) that were employed as defined above.

Denominator: The total number of unduplicated consumers 18-64 years of age that received one or more public community mental health service in state fiscal year 2000. The denominator for the variables gender, age groups, race/ethnicity, diagnosis, and type of mental illness is the total number of unduplicated persons served in each category (e.g., female) as defined above. Persons whose employment status was unknown were excluded from the denominator.

CURRENT IMPLEMENTATION STATUS: Eleven states were able to provide data on employment status in the format specified by the employment workgroup. Ten of the 11 states provided data for unduplicated persons served, one state provided data on admissions only. Data were reported using the standard variables of gender, age, race/ethnicity, diagnosis, type of mental illness (major or not major), and total consumers served. The total number reported for each state does not match the total consumer population served in each state because

study exclusions and state-specific exclusions existed. For example, missing data and persons under age 18 and over age 64 were excluded. Examples of two state-specific exclusions are persons that have been in service for less than one year (Texas) and persons that are not seriously mentally ill according to that state's definition (Illinois). In addition, Illinois was not able to exclude persons 65 and older. Connecticut, while unable to provide the data before the completion of the project, has now completed the change to its data collection system and has started capturing the employment data at admission and discharge for all clients as of Spring 2002.

STUDY RESULTS: The results show that the employment status of persons receiving mental health services in the State Mental Health Authorities varies widely from state to state and by various client characteristics. However, the reported populations of mental health consumers served also vary considerably from state to state. For example, some states serve mostly consumers with major mental illnesses, while other states include Medicaid Waiver populations which may not have as high a level of major mental illnesses. Because of this, caution is urged in drawing conclusions from the results. However, having standard demographic and clinical variables helps somewhat to control for these differences. The table below provides an overview of employment for all states combined for each variable category. (The median percent for all consumers provides a reference point for these comparisons):

Table 1. Employment Status of Unduplicated Persons Served

State	Total Unduplicated Served	Number Employed	Percent Employed	
AZ ¹	27,889	6,451	23.1%	<p>Percent Employed</p>
CO	48,690	17,939	36.8%	
IL ²	64,592	12,090	18.7%	
IN	50,385	17,724	35.2%	
MO ³	8,535	1,177	13.8%	
OK	25,858	3,880	15.0%	
SC ⁴	57,308	9,798	17.1%	
TX	40,709	10,097	24.8%	
UT	22,544	8,452	37.5%	
VA	8,185	1,581	19.3%	
VT	8,170	2,920	35.7%	
Median	27,889	8,452	23.1%	

Note: Please refer to specifications in the text for other information about all 16 states.

1. Arizona employment data are available for less than half of those served.

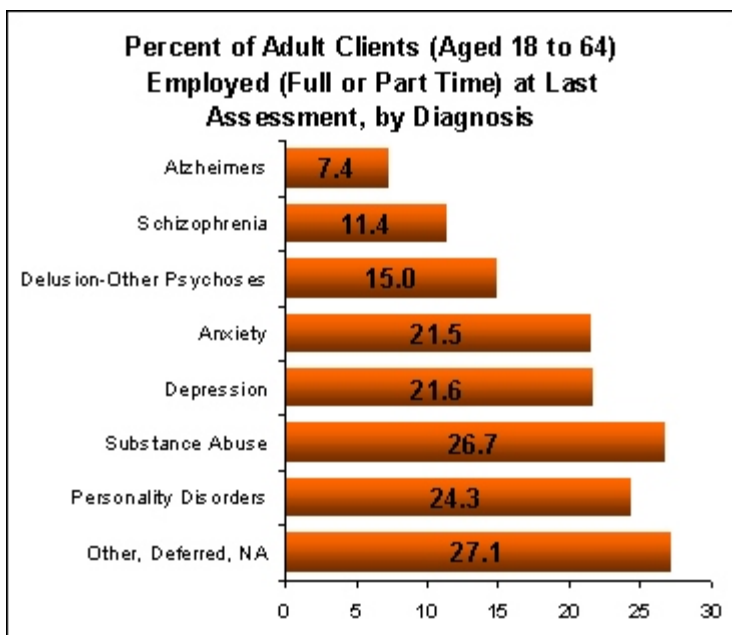
2. Illinois data are only reported for adults with SMI, include over age 65, & are FY 2001 admissions.

3. Missouri only reported for adults with serious mental illness served under the Medicaid Rehabilitation Option. Including other consumers (over 50,000) served in the community would result in an increased overall employment rate for Missouri.

4. South Carolina data include MH, MR, DD, and SA populations served by community mental health centers.

Overall, only a little less than one in four is employed (23%). There is only a small practical difference in median percent between males and females. Persons between 18 and 30 have higher employment medians than those over 30. Persons that are White, Native American, and Hispanic have higher percent employment medians than those that are Asian/Pacific Islanders and Black.

Persons diagnosed as having Alzheimer's, Schizophrenia, and Delusional/Psychosis have much lower employment rates than those in the other five categories. However, because there are low numbers of persons with Alzheimer's and Delusional/Psychosis, schizophrenia is the most important diagnostic category. A comparison of employed persons reported as having schizophrenia shows a low of 2.8 percent in OK and a high of 18.4 percent in UT. Other states with low proportions include SC and TX.



Persons with a major mental illness have a significantly lower median percent employed than those with other diagnoses. Median employment for the states for those persons having major mental illness is 18.0 percent. The lowest proportions of employment among those having major mental illness occurred in OK, MO, and VT, ranging from 10-12 percent. Highest proportions occurred in UT, and CO ranging from 26-28 percent. It is noteworthy, however, that the employment rate even for those not having a major mental illness who were served by the public mental health systems (27.4%) is also low compared to the general population (e.g., UT 77.1%).

SOURCE/S OF INFORMATION:
MIS, Consumer/report

Indicator: Percent of Clients Employed Full or Part Time					
		Number of States	Median	Low Score	High Score
Total		11	23.1%	13.8%	37.5%
Age Group					
	Under age 18	NA	NA	NA	NA
	18-20	11	24.0%	13.9%	43.2%
	21-30	11	30.9%	17.2%	45.8%
	31-45	11	24.1%	15.0%	42.0%
	46-64	11	16.1%	7.9%	30.5%
Gender					
	Female	11	20.2%	12.7%	45.5%
	Male	11	25.8%	15.0%	44.3%
Race/Ethnicity					
	Black	11	16.8%	9.2%	32.6%
	White	11	23.6%	14.1%	39.0%
	Native American	11	19.8%	12.5%	55.2%
	Asian/Pacific Islander	11	16.9%	13.3%	41.2%
	Hispanic	10	26.5%	15.2%	43.7%
Diagnosis					
	Adults w/S MI	11	18.0%	10.2%	28.1%
	Other Adults	11	29.0%	0.0%	46.2%

POPULATIONS:

- | | |
|--|---|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input checked="" type="checkbox"/> All Adults <input type="checkbox"/> Geriatric |

SETTINGS:

☐ Psychiatric Inpatient Settings

☒ Community-based Settings

ISSUES:

Future compilation of employment data should modify the numerator used for the calculation of employment to include persons receiving supported employment and transitional employment as part of the “employed” full or part time category, since both of these services are designed to place consumers in competitive employment settings.

Interpretation and understanding of these overall differences, as well as the variation between states, is a task that will require ongoing analysis and discussion. Questions of definition, populations included, methods of data collection, and data quality need further analysis. Once these issues are understood, we can begin to examine employment as an outcome or change variable.

As an improved approach to gather and analyze data on employment, many states recommend matching mental health service data with state employment agency data as the preferred approach. This is conducive to the sensitive assessment of change over time for individual consumers on measures of the amount of pay received. When aggregated, such data could become valuable indicators of outcome on this important functioning variable.

The employment work group did not formally recommend a procedure for assessing employment outcomes, although it recommended that two outcome options be examined in detail in MHSIP Infrastructure Grant activities. The first option for assessing outcomes is to examine individual client change using data matched with state employment agency data. Change may be assessed over time for given consumers and results presented as outcomes in aggregate percent. Seven of the 11 reporting states either have or intend to pursue this approach.

The second procedure also examines individual client change but is based on clinician-rated employment status or self-rated employment status at different points in time. It begins with consumers that have time one- and time two- (e.g., one year apart) ratings of employment status, and retrospectively compares individual change using these matched individual data points. Results are presented in percent as aggregate outcomes.

Oklahoma has successfully used the first approach, the matched client/state employment agency data to assess outcomes. This approach has the advantage of greater precision in that change can be assessed in the number of hours worked and dollars earned by individuals at different points in time. State employment agencies collect these data. Results are expressed as the amount of aggregate change in hours and dollars. Vermont and Arizona have also successfully matched client data with state agency employment data. Assessing employment outcome by these states is the next logical step.

Colorado has developed a methodology for the second approach based on outcome/information system ratings of change in employment status. That method could be used with the employment categories and definitions used in this study. Both procedures have advantages and disadvantages that may be examined in detail in the Infrastructure Grant.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Dennis Geertsen (Utah)

INDICATOR: 04 PERCENTAGE OF CONSUMERS WITH MAINTAINED OR IMPROVED LEVELS OF FUNCTIONING

RATIONALE FOR USE: Mental health services are expected to improve a person's ability to respond to problems, crises, and everyday situations they encounter. The important aspect is to monitor change in functioning for an individual across time. Depending on the particular situation of the consumer, success could be denoted by either improvement in functioning or in maintenance of functioning level. Different standardized instruments exist for the measurement of functioning.

APPROACH TO MEASURE: The important aspect is to monitor change in functioning for an individual across time. Depending on the particular situation of the consumer, success could be denoted by either improvement in functioning or in maintenance of functioning level. Different standardized instruments exist for the measurement of functioning and it is this multiplicity that has shaped activities on this indicator in the 16-state study.

Several states are using standardized instruments related to functioning within their state systems. The challenge, however, was to develop some form of standardization or comparability across states.

A workgroup was formed to address these issues. Initially, the possibility of developing some calibration across the more commonly used instruments was considered but issues related to context and scaling obviated a satisfactory solution. A second approach was to develop databases for the more commonly used instruments across states. The lack of comparable time frames and the burden of the data collection effort prevented this activity from being accomplished. States reporting the use of functioning measures available at two points in time are presented below.

State	FUNCTIONING INSTRUMENT USED			
	Adults		Children/Adolescents	
	Yes	Instrument Used	Yes	Instrument Used
ARIZONA	Yes	ALFA	Yes	ALFA
COLORADO	Yes	CCAR	Yes	CCAR
CONNECTICUT	Yes	GAF	Yes	GAF
DC	Yes	GAF	Yes	GAF
ILLINOIS	Yes	GAF, MCAS	Yes	GAF, CGAS, CAFAS
INDIANA	Yes	HAPI-A	Yes	HAPI-C
MISSOURI	Yes	Multnomah	Yes	CBCL
NEW YORK	Yes	GAF	Yes	CBCL
OKLAHOMA	Yes	GAF	Yes	GAF
RHODE ISLAND	Yes	GAF	Yes	GAF
SOUTH CAROLINA	Yes	BASIS 32	Yes	CAFAS
TEXAS	Yes	GAF; Multnomah	Yes	CBCL
UTAH	-		-	
VERMONT	-		-	
VIRGINIA	Yes	GAF; Multnomah	Yes	CAFAS
WASHINGTON	-		-	

MEASURE(S):

Measure 1: Percentage of consumers with **improved** functioning

Numerator: Number of persons with functioning change greater than RCI (at time 2)

Denominator: Number of persons in time 1 cohort

[The time 1 cohort could be persons admitted or persons at last evaluation. For new admissions, time 2 – time 1 = 3 months; for persons receiving ongoing care time 2 – time 1 = 6 months. All persons should have measures at admission and discharge.]

Measure 2: Percentage of consumers with **maintained** functioning

Numerator: Number of persons with functioning change less than RCI (at time 2)

Denominator: Number of persons in time 1 cohort

[The time 1 cohort could be persons admitted or persons at last evaluation. For new admissions, time 2 – time 1 = 3 months; for persons receiving ongoing care time 2 – time 1 = 6 months. All persons should have measures at admission and discharge.]

Instruments Recommended: The workgroup has reviewed a number of instruments currently being used by the states. The workgroup has requested states submit de-identified client level information for these instruments that will be analyzed by the workgroup to explore issues in calculating these measures and in comparing results across different instruments.

Adults—[BSI](#), [FARS](#), [BASIS-32](#), [SF36/12](#), [Multnomah](#), [CCAR](#), [GAF](#), [GSO](#), [SLOF](#), [RAFLS](#), [QOL](#), [NYS-PMHP/CAF](#), [FA-SSA](#), [WHO/DAS](#)

Children—[CAFAS](#), [CASA](#), [CGAS](#), [CHIP](#), [CHQ](#), [CIS](#), [Vanderbilt](#), [CCAR](#), [GAF](#), [CAAP](#)
(Information related to psychometric properties, burden, cost, etc. for these instruments are provided in Appendix B.)

CURRENT IMPLEMENTATION STATUS:

While several states have implemented functioning measures, the lack of uniformity in instrumentation and implementation methodology made the operationalizing of this indicator using a common definition and approach impossible.

POPULATIONS:

- | | |
|---|-------------------------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|----------------------------|
| ■ Psychiatric Inpatient Settings | ■ Community-based Settings |
|----------------------------------|----------------------------|

ISSUES:

An important consideration is that various measures are currently being implemented by the states. To compare across these measures, it may be important to develop calibration studies to compare these measures. For elderly persons, maintaining functioning may be the goal, not improving.

The Reliable Change Index, (RCI) described in the literature by Jacobson and Traux,¹ is a statistical method to calculate how much change has occurred at post test in cases where using a cutoff point is not statistically reliable. The formula for the RCI is:

$$RCI = \frac{X_2 - X_1}{S_{diff}}$$

Where X_1 represents the pretest score, X_2 represents the same consumer's post test score, and S_{diff} is the standard error of the difference between the two test scores. S_{diff} can be computed directly from the standard error of measurement (SE); $S_{diff} = \text{the square root of } 2(SE)$. An RCI of 1.96 or greater is significant ($p < 0.05$) and would be unlikely to occur without actual change. In other words, using the RCI adjusts for the S.D. in the pretreatment group and the test-retest reliability of the measure. But, using the RCI alone does not allow one to differentiate change based upon the value of the pre-test score. That is, it does not differentiate the significance of a similar point change in persons starting out at different levels on a scale (a one point change from 5 to 6 versus 34 to 35). Using the log of the pre and post-test scores and the log of S_{diff} allows for this differentiation. This is useful in determining the amount of change that is needed to reach significance for people starting out at high as opposed to low scores and for ascertaining cutoffs where change is not possible, based upon the raw score change needed to achieve a significant RCI (ceiling effect).

Clearly, there are several methodological problems in using the RCI or similar indices in defining "improvement." But such indices are an advance on the methodology used in the five-state study where a percentage increase was used for dissimilar instruments. The RCI is one mechanism to put different measures on the same "statistical" footing. (The underlying problem is that the different instruments measure different areas of functioning.) There is no easy solution to this problem. One approach would be to develop a measure of functioning that would be responsive to the concerns that are considered a priority.

WORKGROUP CHAIR: Mary Smith (Illinois)

¹ Jacobson NS and Truax P 1991. Clinical Significance: A Statistical approach to Defining Meaningful Change in Psychotherapy Research. *Journal of Consulting and clinical Psychology*. 59;1, 12-19.

INDICATOR: 05 PERCENTAGE OF CONSUMERS EXPERIENCING SYMPTOM RELIEF.

RATIONALE FOR USE: A major function of mental health treatment is to provide relief from the symptoms associated with mental illness including suicidality, psychotic symptoms and depressive symptoms.

APPROACH TO MEASURE: The important aspect is to monitor change in functioning for an individual across time. Depending on the particular situation of the consumer, success could be denoted by either reduction in symptoms or in maintenance of symptoms level. Different standardized instruments exist for the measurement of symptom distress.

As in the discussion of the previous indicator related to level of functioning, symptom distress is measured by some states but again, the instruments and implementation methodologies are not consistent across states. The same workgroup that considered issues related to level of functioning also addressed the optimization and comparability of the symptom distress measure. The issues were the same. (See 'Approach to Measure' for Indicator O4 - Level of Functioning.) Also, the discussion of measurement of change standardized instruments for symptom distress is similar to that for level of functioning.

State	SYMPTOM DISTRESS INSTRUMENT USED			
	Adults		Children/Adolescents	
	Yes	Instrument Used	Yes	Instrument Used
ARIZONA	Yes	ALFA	Yes	ALFA
COLORADO	Yes	CCAR	Yes	CCAR
CONNECTICUT	-		-	
DC	Yes	BPRS	-	
ILLINOIS	-		-	
INDIANA	Yes	HAPI-A	Yes	HAPI-C
MISSOURI	Yes	Multnomah	Yes	CBCL
NEW YORK	-		Yes	CBCL
OKLAHOMA	-		-	
RHODE ISLAND	-		-	
SOUTH	Yes	BPRS	-	
TEXAS	Yes	BPRS	Yes	CBCL
UTAH	Yes	General Well-being	-	
VERMONT	-		-	
VIRGINIA	-		-	
WASHINGTON	-		-	

MEASURE(S): Percentage of consumers with reduction in symptoms

Numerator: Number of persons with symptoms change greater than RCI (at time 2)

Denominator: Number of persons in time 1 cohort

[The time 1 cohort could be persons admitted or persons at last evaluation. For new admissions, time 2 – time 1 = 3 months; for persons receiving ongoing care time 2 – time 1 = 6 months. All persons should have measures at admission and discharge.]

CURRENT IMPLEMENTATION STATUS: While several states have implemented measures related to symptoms distress, the lack of uniformity in instrumentation and implementation methodology made the operationalizing of this indicator using a common definition and approach impossible.

SOURCE/S OF INFORMATION: Clinician Report, Self Report

POPULATIONS:

- | | | |
|---|----------------|-------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children | |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults | ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|----------------------------|
| ■ Psychiatric Inpatient Settings | ■ Community-based Settings |
|----------------------------------|----------------------------|

ISSUES: The Client Assessment Instrument Workgroup is recommending calibration studies to compare measures from different instruments. See the discussion under Indicator O3: Change in Client Functioning for additional details on possible approaches.

WORKGROUP CHAIR: Mary Smith (Illinois)

INDICATOR: 06 ADVERSE OUTCOMES: CONSUMER INJURIES

RATIONALE FOR USE: If inpatient mental health services are to be maximally effective, consumers must feel that they are in a safe environment that is free of unusual physical risks. The rate of physical injury reflects not only the safety of the physical structures of the facility but may also reflect the effectiveness or appropriateness of care. Ineffective care may result in abnormally high instances of harm to consumers by self (self-injurious behavior) or others (acts of physical violence). Inappropriate care may be reflected in high rates of injury caused by neglect (e.g. falls) or injuries inflicted by abusive staff.

APPROACH TO MEASURE: In order to provide some degree of comparability, the total number of client injuries were adjusted by the total time "at risk". In this case, the time at risk was defined as the total days all consumers were in the facility or under the responsibility of the facility. The measure was calculated for a 12-month period for the duplicated number of consumers served.

Automated client tracking and incident reporting system at the hospitals were necessary to gather consistent data for the measure. Lack of automated information systems limited the participation of some states and the level of demographic and clinical specificity of the rates in other states.

Client injuries were defined in accordance with the specification of the NRI's Behavioral Healthcare Performance Measurement System used for compliance with JCAHO accreditation requirements. For this System, a reportable event is a physical injury that requires medical intervention beyond first aid. This standard was adopted because the vast majority of state hospitals participate in the System, thus a consistent definition was in use by all hospitals regardless of state specific regulations. However, some states' data systems did not provide a distinction between levels of care required from injuries; although incident reports would have provided that detail, not all information on incident report are entered into data bases.

MEASURE(S): Number of Consumer (Client) Injuries per 1,000 Inpatient Days

Numerator: Total number of reported incidents that resulted in injury to consumers on the inpatient census (including consumers on leave status) during the reporting period.

Denominator: Sum of the daily census (including consumers on leave status) for each day in the reporting period (client days), divided by 1000.

CURRENT IMPLEMENTATION STATUS: Capacity to produce the indicator varied widely across participating states. Eight of the 16 state grantees were able to provide data to date. They are Arizona, Illinois, Rhode Island, Washington, Texas, Vermont, Missouri, and Virginia. Three states (Rhode Island, Vermont, Virginia) reported data for FY2000, three states (Arizona, Missouri, and Washington) reported data for FY2001, and Texas reported data for CY2000. Vermont and Virginia provided only aggregate data for the indicator; other states were able to provide rates for sub-groups of consumers. Illinois reported only aggregate data for this indicator.

STUDY RESULTS: The following table provides the rates of client injuries per 1000 inpatient days in seven states. The appendix table provides rates for sub-groups of consumers including age, gender, race, and diagnoses. The median number of injuries is 0.51 per 1,000 inpatient days, with a minimum of 0.02 and a maximum of 7.75.

	AZ	IL	MO	RI	TX	VT	VA	WA
Client Injuries/1000 Inpatient days	6.94	0.73	0.17	0.02	0.48	7.75	0.43	0.55

The following caveats apply to the data in the preceding table:

- Data includes only state hospitals except in RI where data represent one general hospital with an inpatient psychiatric unit and one private hospital with state contracted beds.
- TX and VA do not serve consumers in their state hospitals with a primary diagnosis of substance abuse.
- RI and VT do not serve youth in their state hospitals.
- RI does not include forensic consumers in data.
- VA database does not allow the distinction between degree of medical intervention required.

Consistent patterns shared by the states are limited. Five states provide information for specific sub-groups of consumers. Client injury rates per 1000 inpatient days were higher for younger adults than older adults. Female consumers had higher injury rates per 1000 inpatient days than male consumers. There was no consistent pattern for differences in injury rates for consumers of different race groups. Adults with SMI had lower injury rates per 1000 inpatient days than adults with other disorders.

SOURCE/S OF INFORMATION: MIS, Hospital Incident Monitoring System

POPULATIONS:

- Children with a Serious Emotional Disturbance
- Adults w/ a Serious Mental Illness
- All Children
- All Adults
- Geriatric

SETTINGS:

- Psychiatric Inpatient Settings
- Community-based Settings

ISSUES:

There are some variations in the types of hospitals and populations served and/or reported in these data. The majority of the states reported only on the state mental hospital data; however, one state included private hospitals with state-contracted beds. Some states included forensic consumers, youth and elders, and consumers with substance abuse disorders; other states do not include these populations in the state facilities included in the data.

Risk adjusting the data with respect to hospital size, population composition/type, and the population demographic is highly recommended. Methodology to risk adjust the data was not available to the subgroup during the study period. Collaborating with the NRI was recommended.

Inasmuch as the majority of the states participate in the NRI's Behavioral Healthcare Performance Measurement System, it was recommended that consideration be given to ensure consistent and sustained reporting of the indicator in the future. Currently, data reported for the NRI Behavioral Healthcare Performance Measurement System is used to compute monthly indicator rates; the measures reported above represent an annual assessment.

Finally, it was recommended that future study of this indicator include examination of the severity of the injury by looking at the type of intervention required of the reported injury. In addition, the cause of injury may also provide valuable information for operational planning.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Bernadette E. Phelan (Arizona)

INDICATOR: 07 ADVERSE OUTCOMES: ELOPEMENT

RATIONALE FOR USE: Psychiatric hospitals, particularly institutions serving consumers with severe and persistent mental illnesses, have a unique responsibility for insuring both client and public safety. Often, the effects of brain disorders that produce mental illness render an individual's thinking unclear and, at times, irrational. Actions based on such distorted thinking can result in harm to self or others. Harm secondary to distorted thinking can be minor (the development of a minor illness due to insufficient clothing during cold weather) or serious (traffic accident injuring several people). When such consequences are likely, it is desirable for consumers to be closely cared for in a safe environment. High rates of elopement from inpatient psychiatric facilities may represent insufficient efforts to insure client and public safety. Alternatively, such high rates may indicate a less than desirable treatment environment from which consumers are likely to leave. In either case, opportunities for improvement exist.

APPROACH TO MEASURE: In order to provide some degree of comparability, the total number of client elopements were adjusted by the total time "at risk". In this case, the time at risk was defined as the total days all consumers were in the facility or under the responsibility of the facility. The measure was calculated for a 12-month period for the duplicated number of consumers served.

Automated client tracking and incident reporting system at the hospitals were necessary to gather consistent data for the measure. Lack of automated information systems limited the participation in some states and the level of demographic and clinical specificity of rates in other states.

Elopements were defined in accordance with the specification of the NRI Behavioral Healthcare Performance Measurement System used for compliance with JCAHO accreditation requirements. This standard was adopted because the vast majority of state hospitals participate in the System, thus a consistent definition was in use by all hospitals regardless of state specific regulations.

MEASURE: Number of Elopements Per 1000 Inpatient Days

Numerator: The total number of elopements which occurred during the reporting period.

Denominator: Sum of the daily census (including consumers on leave status) for each day in the reporting period (client days), divided by 1000. Included populations: all inpatients (inpatients on the last day of the reporting period, inpatients discharged during the reporting period and inpatients who died during the reporting period).

CURRENT IMPLEMENTATION STATUS: Eleven states submitted data for this indicator. They are: Arizona, Colorado, Missouri, Oklahoma, Rhode Island, South Carolina, Texas, Utah, Vermont, Virginia, and Washington. Three states (Arizona, Missouri, and Washington) reported FY2001, five states (Colorado, Rhode Island, South Carolina, Utah and Vermont) reported FY2000, Texas reported CY2000 data, Oklahoma reported FY2000 and FY2001, and Virginia reported FY1999 and FY2000.

Capacity to produce the indicator varied widely across participating states. Oklahoma and Virginia submitted data for two fiscal years while the rest of the reporting states have data for

only one year. Virginia, however, provided the state total only with no further breakdown. Vermont was not able to provide a diagnostic breakdown of the data.

STUDY RESULTS: The following table provides the rates of client elopements per 1000 inpatient days in seven states. The appendix table provides rates for sub-groups of consumers including age, gender, race, and diagnoses. The median number of elopements is 0.27 per 1,000 inpatient days, with a minimum of 0.02 and a maximum of 0.77.

	AZ	CO	MO	OK	RI	SC	TX	UT	VA	VT	WA
Elopements/1000 Inpatient Days	0.27	0.77	0.32	0.30	0.02	0.14	0.22	0.15	0.16	0.57	0.75

The following caveats apply to the data in the preceding table:

- Data includes only state hospitals except in RI where data represent one general hospital with an inpatient psychiatric unit and one private hospital with state contracted beds.
- TX and VA do not serve consumers in their state hospitals with a primary diagnosis of substance abuse.
- RI and VT do not serve youth in their state hospitals.
- RI does not include forensic consumers in their data.

Consistent patterns shared by the states are limited. Ten states provide information for specific sub-groups of consumers. The rate of elopement was greater among the male consumers than the female consumers. Among adult consumers, the rate of elopement was greater among young adults 18-30 than adults over 30 years of age. Also among adults the rate of elopement was greater among adults with serious mental illness than adults with other disorders in five states, while greater for adults with other disorders in three state.

SOURCE/S OF INFORMATION: MIS, Hospital Incident Monitoring System

POPULATIONS:

- Children with a Serious Emotional Disturbance
- Adults w/ a Serious Mental Illness
- All Children
- All Adults
- Geriatric

SETTINGS:

- Psychiatric Inpatient Settings
- Community-based Settings

ISSUES: There are some variations in the types of hospitals and populations served and/or reported in these data. The majority of the states reported only on the state mental hospital data; however, one state included private hospitals with state-contracted beds. Some states included forensic consumers, youth and elders, and consumers with substance abuse disorders; other states do not include these populations in the state facilities included in the data.

Risk adjusting the data with respect to hospital size, population composition/type, and the population demographic is highly recommended. Methodology to risk adjust the data was not available to the subgroup during the study period. Collaborating with the NRI was recommended.

Inasmuch as the majority of the states participate in the NRI Behavioral Healthcare Performance Measurement System, it was recommended that consideration be given to ensure consistent and sustained reporting of the indicator in the future. Currently, data reported for the NRI Behavioral Healthcare Performance Measurement System is used to compute monthly indicator rates; the measures reported above represent an annual assessment.

Finally, it was recommended that future study of this indicator should include examination of the length of time until consumers are recovered.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Bernadette E. Phelan (Arizona)

INDICATOR: 08 MORTALITY: HEALTH STATUS OF THE SERVED POPULATION AS MEASURED BY THE STANDARDIZED MORTALITY RATE AND AVERAGE AGE OF DEATH.

RATIONALE FOR USE: Mortality rates are commonly used as global measures of health status for populations (Grob, 1983; Zopf, 1992). They are increasingly being used as indicators of performance of public health efforts; for example, mortality rates are used a number of times in Healthy People 2000 as performance measures. In addition, there is a long and extensive literature indicating that persons with mental illnesses die at higher rates and at younger ages from nearly all causes, both natural and medico-legal (i.e., homicide, suicide, or accidents/injuries) (e.g., Dembling, 1995; Segal & Kotler, 1991; Winokur & Black, 1987; Babigian & Ordoroff, 1969). This literature provides compelling evidence to track mortality as a measure of health status for persons receiving mental health services.

APPROACH TO MEASURE: While few states routinely monitor this information, this was considered an important indicator for monitoring the health status of persons with mental illnesses even though the incidence of such occurrences might be low. Four alternative measures for monitoring this indicator were tested by the states and are discussed below.

MEASURE(S):

Measure 1: Crude Mortality Rate (CMR) for the population of persons who received at least one service from a public mental health system during a year.

Numerator: Number of deaths among persons who received at least one service from the public mental health system during a year.

Denominator: Total number of persons who received at least one service from the public mental health system during the same year (the service population during the year or unduplicated served).

Measure calculations and comparisons overview: For each state and each year, CMRs are computed using the number of deaths in the population of consumers who received at least one service from the state public mental health system during the year. The number of deaths during the year are divided by the number of consumers served and then multiplied by 100,000 to adjust to that comparison level. These CMRs are compared with yearly CMRs for state residents published by the Center for Disease Control and Prevention (CDC), National Center for Health Statistics. **CMRs are not standardized or adjusted to account for differences in gender or age distribution in the population.**

Measure 2: Age-Adjusted Mortality Rate for the population of persons who received at least one service from a public mental health system during a year and died during that year.

Measure calculations and comparisons overview: Age-Adjusted Mortality Rates were computed for each year in each state for deceased mental health consumers who received public mental health system service during their year of death. Client Age-Adjusted Mortality Rates are compared to the yearly statewide Age-Adjusted Mortality Rates published by the Center for Disease Control and Prevention (CDC), National Center for Health Statistics.

Age adjustment or standardization is used in comparing different populations and geographic areas, because age is a main determinant of mortality. In this direct method of standardization, age specific death rates from two populations (client service population and the statewide population) with different age structures are applied to a third "standard" population. CDC uses the U.S. 1940 Standard Population for standardizing or adjusting 1997 and earlier years and the U.S. 2000 Standard Population for 1998 and later years. This methodology was adopted for these analyses of mental health consumers, so that comparisons can be made with findings of CDC and other researchers.

Measure 3: Standardized Mortality Ratio (SMR) for the population of persons who received at least one service from a public mental health system during a year. The SMR is defined as the ratio of the number of observed deaths in a population to the number of expected deaths based on an overall population, controlling for age and sex.

Numerator: The number of deaths occurring among persons who received at least one service during the year from a state public mental health system.

Denominator: The number of deaths expected in the state service population of persons, who received at least one service during the year, based on the mortality rate of the overall state population, with adjustment for age and sex.

Measure calculations and comparisons overview: In this indirect method of standardization, yearly age specific death rates for males and females in the general population of each state are applied to the service population by age and gender of the state public mental health system to estimate the expected number of deaths in the service population. The number of observed deaths among the service population during a year is compared to the number of expected deaths in the service population of the system during the same year to create the Standardized Mortality Ratio. The SMR is calculated by dividing the actual number of client deaths by the expected number of deaths for the year. If the SMR is greater than 1.0, the relative risk of death for mental health consumers is higher than for the general population of the state.

Measure 4: Average Number of Years of Life Lost (YLL) for public mental health service recipients who died during the last year. This measure is defined as the difference between the age at death and life expectancy for an individual.

Numerator: The sum of the life expectancies at time of death for persons who received at least one service during a certain year.

Denominator: The number of persons who received at least one service in that year who died and whose age of death was available.

Measure calculations and comparisons overview: In calculating the Average Years of Life Lost for male and female consumers, the life expectancy for each consumer according to gender and age at time of death was based on Life Expectancy Tables for the population of the United States during the year of death. Life Expectancy Tables are developed and published by the Center for Disease Control and Prevention.

CURRENT IMPLEMENTATION STATUS: The four measures for this indicator require the identification of consumers who died while being served by state public mental health systems and analyses of data about these consumers. Nine states submitted mortality data for the 16-State Study. Mental health agencies in six states electronically linked and matched client records with death records from their state vital statistics agencies. Some of these states used computer software developed by the Oklahoma State Mental Health Authority to match death records and client data. Statistical analysis software, such as SPSS or SAS, were also used in matching and determining whether services had been received by consumers during the year of their deaths. Virginia used deaths reported for consumers in state hospitals. Washington, D.C. used reported deaths along with some matching of consumers and other procedures. Individual records were provided by most states for each deceased client. Vermont submitted annual mortality rates based on four years and probabilistic population estimation procedures. Arizona matched consumers and death records, analyzed the results and submitted the indicator measures.

Matching client records and death records often requires working with an agency other than the state mental health authority. Accuracy and the same identifiers, such as name, birth date and Social Security number are needed to match consumers with death records. There may be delay until death records are available for use, sometimes as long as nine or ten months from the end of a calendar year. Because of matching needs, difficulties in obtaining death record data and other reasons, there are differences between states in the years of death information submitted. Data were submitted for years 1997-2001, but all nine states did not submit data for all years.

Additional data are needed to calculate the mortality measures. Gender and age profiles of unduplicated consumers (the public mental health service population) are required from each state mental health agency for years in which deaths are reported. Age specific death rates by gender and age for state residents are needed from each state for the same years. Published National Vital Statistics Reports from the Center for Disease Control and Prevention (CDC) provide statewide Crude Mortality Rates and Age Adjusted Mortality Rates as well as Life Expectancy tables nationwide for the United States.

State Specifications

- **Arizona:** Consumers were matched with death records. Analysts at the Arizona state mental health agency calculated the measures and submitted them for CY 1999 and CY 2000.
- **District Of Columbia:** Washington, D.C. uses multiple sources to identify deaths among consumers, including automated admission/transfer/discharge, unusual incident reports, program death reports, death certificates and deaths ascertained from a database by using a person's Social Security number. Data were submitted for 1998, 1999 and 2000.
- **Missouri:** Consumers were matched with death records using the state's own software. Data were submitted for 1997, 1998, 1999 and 2000.
- **Oklahoma:** Consumers were matched with death records. Data were submitted for 1997, 1998, 1999 and 2000.
- **Rhode Island:** Consumers were matched with death records based on SSN, date of birth, and gender. Data were submitted for year 2000.
- **Texas:** Consumers were matched with death records. Data were submitted for 1997, 1998 two thirds of 1999. Mortality measures for 1999 were calculated based on deaths projected to the end of the year using submitted data and assuming that the death rate would be the same during the last third of 1999 as during the first two-thirds.

- **Utah:** Consumers were matched with death records. Data were submitted for 1998 and 1999.
- **Vermont:** Consumers represented in death records database were measured using probabilistic population estimation and data were submitted for 1998 to 2000. Vermont rates were calculated for a multi-year period in order to minimize the effects of annual fluctuations.
- **Virginia:** Deaths reported for consumers who died while in Virginia state hospitals or mental health treatment were submitted for 1998, 1999, 2000 and 2001.

Measure 1: Crude Mortality Rates (CMR)

Crude Mortality Rates (CMR) in this study show rates of deaths per 100,000 in the population of public mental health consumers and the general population of the state. The number of deaths of mental health consumers served during a year was determined, divided by the service population or the unduplicated number served during the year and multiplied by 100,000 to adjust to that comparison level. The Crude Mortality Rate for each state was calculated by CDC using the deaths reported in that state during a year divided by the total population of the state for the year and then adjusted to the per 100,000 population rate.

In 13 out of 22 comparisons between yearly statewide CMRs and mental health client CMRs, statewide Crude Death Rates are higher. Crude Mortality Rates for public mental health consumers in eight states and Washington, D.C. are displayed along with statewide population CMRs. States in the 16-State Study were not able to submit data for every year, as mentioned earlier. Caution is needed with these comparisons and in comparing states, because no adjustments are made for age. The results are different when age adjustments using a standard population are applied.

Measure 2: Age-Adjusted Mortality Rate

An Age-Adjusted Mortality Rate shows a rate of deaths per 100,000 U.S. standard population. Since age is a main determinant of mortality, age adjustment procedures using a standard population age distribution are applied to make population death rates more comparable. For these analyses, methodologies used by epidemiologists, the CDC and others are applied. Consumers are divided into eleven age groups: under 1 year of age; 1-4 years; 5-14 years; 15-24 years; 25-34 years; 35-44 years; 45-54 years; 55-64 years; 65-74 years; 75-84 years; and 85 years and older. Age specific death rates are calculated in each age group of public mental health consumers by dividing the number of deaths in that age group by the total number of consumers served in that age group. To adjust or standardize, the age specific death rate for each group is multiplied by the population percent for that age group in the standard population used by CDC, the 1940 U.S. standard population was used for 1997, and year 2000 standard population for 1998, 1999, and 2000. These age-adjusted products for the age groups are added together to create the Age-Adjusted Mortality Rate for the served public mental health client population in the state each year. Similar procedures are applied by CDC to calculate the Age-Adjusted Mortality Rates published in National Statistics Reports and are used in this report.

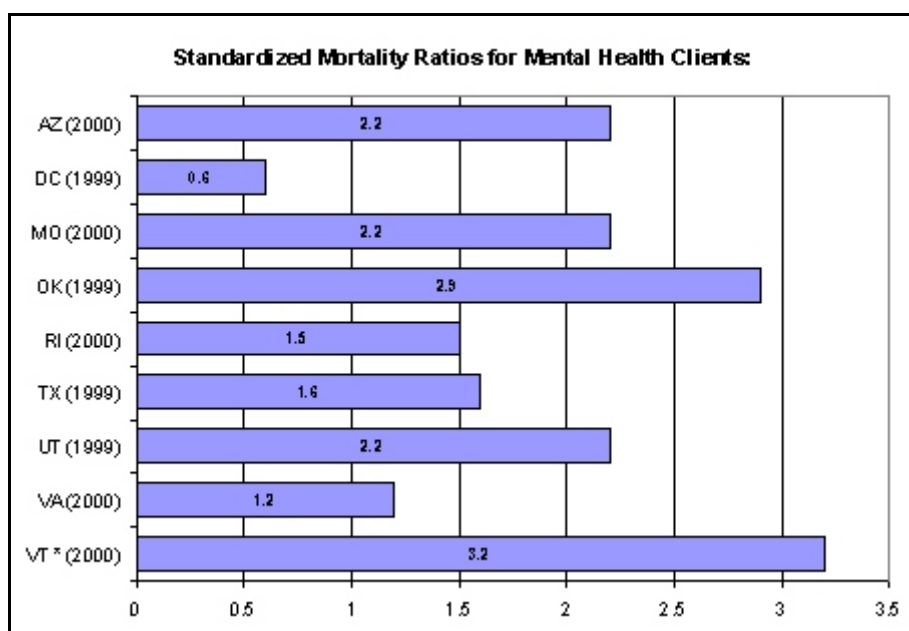
Public mental health client populations have higher age-adjusted mortality rates in 20 out of 22 comparisons with the general populations of the states. Thus, public mental health consumers have a greater risk of dying than the general population in most of these analyses. All seven states have higher rates for mental health clients during every year submitted. Only in Washington, D.C. did public mental health clients have lower age adjusted rates than the general population, and this was in two out of three years.

Vermont calculated mortality rates using a different procedure. Consumers represented in death records database were measured using probabilistic population estimation and data were submitted for 1998 to 2000. Vermont rates were calculated for a multi-year period in order to minimize the effects of annual fluctuations..

Measure 3: Standardized Mortality Ratio (SMR)

The Standardized Mortality Ratio (SMR) compares the expected number of deaths for public mental health consumers in a state projected using age-gender specific death rates for residents of the state during a particular year with the actual number of deaths among the consumers during that year. Both age and gender are used, because they are main determinants of death. The number of male consumers and the number of female consumers are determined in each of the eleven age categories mentioned earlier for Age-adjusted Mortality Rates. The number of consumers in each gender-age category is multiplied by the age-gender specific death rate in that category for the state general population and then divided by 100,000. The quotients from all the gender-age categories are added together to estimate the number of deaths expected per 100,000 public mental health consumers during the year. The SMR is calculated by dividing the actual number of client deaths by the expected number of deaths for the year. If the SMR is greater than 1.0, the relative risk of death for mental health consumers is higher than for the general population of the state.

In eight states across all years, the SMRs were greater than 1.0, while in D.C. the SMRs were less than 1.0. Consequently, the relative risk of death is higher for mental health consumers than the general population in almost all comparisons. In Arizona, Missouri, and Utah, the actual numbers of deaths were twice as high as expected deaths. In Oklahoma and Texas, the actual numbers of deaths were four or more times the expected deaths during several years. In Virginia and Rhode Island, the actual number of deaths ranged from 1.6 to 1.2 times higher than expected deaths. Vermont had an estimated annual SMR of 3.2 for 1998-2000. Only in the District of Columbia were actual numbers of deaths lower than expected.



Measure 4: Average number of years of life lost (YLL): Twenty-five to over 30 years of life were lost per client in every state, except Virginia where the average was 13 to 15 years per hospital consumer. Virginia reported deaths for ONLY state hospital consumers, where as other states reported for community mental health center consumers and state hospital consumers. The Average Number of Years of Life Lost (YLL) by public mental health consumers is

calculated by summing the life expectancies for consumers at their time of death based on CDC national life expectancy tables for the year and then dividing the total by the number of deceased consumers.

Characteristics of deceased public mental health consumers: Clients with Major Mental Illness (MMI) had higher Average Years of Life Lost (YLL) than non MMI clients in 13 out of the 19 comparisons. For these 13 comparisons the additional years of life lost by MMI clients ranged from one-half to eight years more than non MMI clients. The median average Years of Life Lost for MMI clients in all 19 comparisons was 1.8 years higher than that of the non MMI clients. In 4 states, MMI clients had higher YLL during all years compared. MMI clients had higher YLL in Missouri during 2 out of 4 years and in Utah during 1 out of 2 years. Calculations of YLL are based on life expectancy tables and age at time of death. So even though MMI clients in Utah during 1999 died at a slightly younger average age than non MMI, the MMI clients had a slightly lower YLL. Only in Washington, D.C. did non MMI have higher YLL during all years submitted. Percentages of MMI clients in each state by year ranged from 24.2 percent of Virginia patients in 2000 to 83.3 percent of Texas clients in 1999.

Clients with Major Mental Illness (MMI) include adults with DSM-IV diagnosis codes 295-298 and children/youth with DSM-IV diagnosis codes 295-298 and 314. For adults this encompasses those with Schizophrenia, Major Depressive Disorders, Bipolar Disorders, Delusional and Psychotic Disorders. For children and youth this encompasses these same diagnoses plus Attention Deficit/Hyperactivity Disorder.

The workgroup report available via the website displays age, gender, race/ethnicity, major mental illnesses (MMI) and diagnoses of deceased consumers who received mental health services during the year in which they died.

Burden: The burden of calculating these measures depends on how the data are collected. One option is the electronic linking of enrollment or consumer registry records with death records from state Departments of Public Health or vital statistics agencies. This linking requires some technical capacity, considerable data processing resources, and probably requires a data sharing agreement with another agency. Alternatively, if the mental health system has a mechanism to track deaths of service recipients, this would obviate the need for an electronic match. Even if such a system is in place, overall population death records or at least summary statistics would need to be obtained for Measure 2.

SOURCE/S OF INFORMATION: Management Information Systems, encounter data, vital statistics/public health authority death records, other mortality tracking system.

POPULATIONS:

- | | |
|---|-------------------------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|----------------------------|
| ■ Psychiatric Inpatient Settings | ■ Community-based Settings |
|----------------------------------|----------------------------|

ISSUES: Several points should be made, particularly with respect to use and interpretation of this indicator. First, as with other measures, appropriate risk adjustment methods need to be employed before certain comparisons can be made; this is particularly important for the first

measure, since the SMR adjusts for age, sex and the overall mortality rate of a geographic area by definition. Second, mortality is the result of complex processes that may be influenced by events from the immediate and the more distant past. As such, mortality may be influenced by events occurring before the period for which performance is to be measured. Unless these events are irreversible, however, we can expect successful service interventions aimed at improving the health status of a population to be reflected in these measures. Third, this indicator is most useful when the served population is large, for example in a statewide system. If the system serves only a relatively small number of persons, random variation over time may be misinterpreted as reflecting system performance.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Craig Colton (Utah)

INDICATOR: 09 PERCENTAGE OF ADULT CONSUMERS EXPERIENCING RECOVERY

RATIONALE FOR USE: Recovery or “procovery” is a complex concept which represents the idea that people can successfully contend with severe and persistent mental illnesses and create positive, meaningful lives. As the U.S. Surgeon General’s Report on Mental Health points out, a new recovery perspective is supported by evidence on rehabilitation and treatment as well as by the personal experiences of consumers. The notion of recovery reflects renewed optimism about the outcomes of mental illness, including those achieved through an individuals self-care efforts, and the opportunities open to persons with mental illness to participate to the full extent of their interests in the community of their choice.

Mental health systems are increasingly embracing a recovery orientation even to the extent that recovery becomes overarching, desirable outcomes for adults with severe and persistent mental illness.

APPROACH TO MEASURE: While recovery is emerging as a key, singular concept, there is neither a single agreed-upon definition nor a single way to measure it. In mental health performance measurement systems, the measurement of recovery has been approached through the measurement of related concepts and concepts which are components of recovery such as self-esteem, hope, respect and dignity. In the 16-state study, several states had proposed the development of a recovery instrument as an area they wanted to broach. Rather than have several state efforts, interested states decided to move forward collaboratively to develop a recovery measure.

Recovery measurement experts, both consumer and non-consumers, and state mental health agency representatives convened in Austin, Texas in May 2000 to initiate this effort. The expert panel clarified that recovery is both a personal journey and a complex process which extends beyond the boundaries and influences of the mental health system. Mental health systems, however, can positively and negatively influence personal recovery. The group explicitly rejected the development of a standardized measure of recovery, primarily because of fear that such a measure could be used to cut off access to needed services. A definition of recovery was developed and adopted:

Mental health recovery is an ongoing dynamic interactional process between a persons strengths, vulnerabilities, resources and the environment involving a personal journey of actively self-managing psychiatric disorder while reclaiming, gaining and maintaining a positive sense of self, roles and life beyond the mental health system (in spite of the challenge of psychiatric disability). It involves learning to overcome disabilities, to live independently and to contribute to society and is supported by a foundation based on hope, belief, personal power, respect, connections and self-determination.

Subsequent conference calls identified the need for structured collection of grassroots consumer input concerning what they have found helps them achieve recovery, including information on how mental health systems facilitate or retard the process. A research team was established to provide a consumer-driven research effort.

The research team conceptualized the recovery measure development project in three phases. Phase I creates grounded theory concerning the phenomenon of recovery and the ways in

which the social environment, including the mental health system, impacts the process. It is a qualitative research design to consumer/survivor experience and understandings related to the recovery process. Phase II will propose prototype performance indicators based on Phase I results. In Phase III, the resulting instrument will be pilot-tested in participating states.

The focus of 16-State Study activities was on Phase I. The research team created a set of questions to solicit consumer/survivor input in five domains: (1) resource/basic needs, (2) choices/self determination, (3) independence/sovereignty, (4) interdependence/connectiveness, and (5) hope. The project incorporated a multi-site focus group approach that was implemented in nine states. The nine states were: Arizona, Colorado, New York, Oklahoma, Rhode Island, South Carolina, Texas, Utah and Washington. Through grant funds, states provided resources for convening the focus groups, facilitators and transcript recording and editing.

The research team developed a standardized focus group that was reviewed by SMHA staff and consumers in each state. A teleconference training and an extensive set of guidelines were provided to focus group facilitators. Thus, all facilitators used an identical set of guidelines and appropriate procedures. Each focus group had co-facilitators, at least one of whom was a consumer. The groups were tape-recorded and verbatim transcripts prepared.

These transcripts were then analyzed and coded and themes for the pooled data set across all four groups which became the basis of a code book which was then used to recode the original transcripts. (Member checks were also conducted, the purpose of these being to check with focus group participants that the themes made sense and accurately reflected the original intent.) The final report of these analyses and results are expected in June, 2002.

Populations:

- | | | |
|--|---------------------------------------|------------------------------------|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children | |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input type="checkbox"/> All Adults | <input type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Psychiatric Inpatient Settings | <input type="checkbox"/> Community-based Settings |
|--|---|

WORKGROUP CHAIR: Vijay Ganju (NRI)/Steve Onken(Columbia U.) And Jean Dumont

INDICATOR: O10 PERCENTAGE OF CONSUMERS WHO EXPERIENCE REDUCED IMPAIRMENT FROM SUBSTANCE ABUSE

RATIONALE FOR USE: Because there is a high likelihood of co-occurring psychiatric and substance disorders, it is important to document the degree to which substance disorders are identified within populations of mental health consumers. To achieve some of the outcomes that are the objectives of the system, the substance abuse component must also be addressed.

APPROACH TO MEASURE: The 16-State Study Workgroup on Substance Abuse discussed several potential indicators and methods to measure substance abuse within the public mental health systems. This indicator is complex having at least three components:

- Identification of consumers with substance abuse issues/impairment;
- Evaluation of a degree of substance abuse; and
- Utilization of services expected to reduce substance abuse and reduce the negative exacerbating effects of substance abuse on mental health problems, functioning, and strengths.

Accordingly , indicator O10 was sub-divided into components

- O10a:** Percentage of Mental Health Consumers with Co-occurring Substance Problems
- O10b:** Percentage of Mental Health Consumers with Co-occurring Substance Problems Who Receive Treatment for Co-occurring Problems
- O10c:** Percentage of Mental Health Consumers with Co-occurring Substance Problems Who Experience a Reduction in Substance Problems.

The Indicator Workgroup conducted a survey of the 16-State Study states to ascertain how they can measure these different aspects of substance abuse impairment in the mental health system. The workgroup developed some recommended measures and conducted tests on several methods of assessing substance abuse impairment, but did not gather data from state on any particular indicator.

MEASURE(S): As described above, the 16-State Study did not compile data from states on any particular indicators under this area. There are three indicators that the workgroup has been considering:

- Indicator O10a:** Percentage of Mental Health Consumers with Co-occurring Substance Problems

Goal of Indicator: The goal of the indicator is to determine the degree to which substance problems are identified within mental health populations. In order to calculate this indicator screening and assessment for substance use and problems need to be done on all consumers of mental health services. The operational outcome that is available within most systems consists of the presence of a substance related DSM-IV diagnosis in conjunction with a mental health diagnosis. Additional desirable measures would include screening and assessment scores that reach a level of clinical significance or importance.

Numerator: Number of persons having a co-occurring substance diagnosis

Denominator: Total number of mental health consumers.

Indicator O10b: Percentage of Mental Health Consumers with Co-occurring Substance Problems Who Receive Treatment for Co-occurring Problems

Goal of Indicator: The goal of the indicator is to determine the degree to which mental health consumers identified as having substance problems are receiving treatment for the co-occurring conditions. Substance abuse disorders complicate and exacerbate mental health conditions and their treatment. Therefore it is imperative that treatment for co-occurring disorders be conducted when co-occurring conditions are present.

In order to calculate this indicator enumeration of persons receiving substance abuse services or enrollment in programs for co-occurring problems is required.

Numerator: Number of persons having a co-occurring substance diagnosis and receiving co-occurring treatment

Denominator: Number of persons having a co-occurring substance diagnosis

Indicator O10c: Percentage of Mental Health Consumers with Co-occurring Substance Problems Who Experience a Reduction in Substance Problems.

Goal of Indicator: The goal of the indicator is to monitor change in substance problems over time. Different instruments exist for the assessment of substance problems. Valid and usable measures will be ones that have known test-retest or inter-rater reliabilities and that are adequately sensitive to change. Substance abuse disorders complicate and exacerbate mental health conditions and their treatment. Therefore changes in substance problems need to be monitored. Reduction of substance problems are expected to reduce the exacerbating effect of substance problems on mental health problems.

In order to calculate this indicator screening and assessment for substance use and problems need to be done on consumers of mental health services. The assessment measures need to have documented reliability estimates and be valid assessments of substance problems.

There are two possible measures:

Measure 1: assumes that assessment instruments can categorize substance use/problems into two categories: significant and non-significant.

Numerator: Number of persons having a co-occurring substance diagnosis at time 1 whose substance problems were not clinically significant at time 2

Denominator: Number of persons having a co-occurring substance diagnosis at time 1

Measure 2: assumes that assessment instruments reliably measure substance use/problems on a continuous scale. Valid and usable measures will be ones that have known test-retest or inter-rater reliabilities and that are adequately sensitive to change.

Numerator: Number of persons having a co-occurring substance diagnosis at time 1 that have a change in substance problems greater than the Reliable Change Index (RCI) value for the measure. The RCI is a measure that relates change to the instruments reliability and variance.

Denominator: Number of persons having a co-occurring substance diagnosis at time 1

SOURCE/S OF INFORMATION: Clinician Report, Self Report

POPULATIONS:

- | | | |
|---|----------------|-------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children | |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults | ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|----------------------------|
| ■ Psychiatric Inpatient Settings | ■ Community-based Settings |
|----------------------------------|----------------------------|

ISSUES: The Substance Abuse Impairment Workgroup is conducting a survey of 16-State Study states to ascertain in what form this indicator can be reported. The survey results are discussed below.

The first part of this indicator, percent of mental health consumers with co-occurring substance problems, can be calculated by most states using information stored in multiple diagnosis fields. In practice, however the diagnostic assessment of substance problems within populations of mental health consumers is often inadequate, leading to a substantial underestimate of the number of persons with co-occurring problems.

Ideally there would be standardized procedures for screening, assessing, and diagnosing substance use disorders across states. Using the 1998-1999 NASMHPD-NASADAD framework² then building into the framework assessment techniques and strategies for measuring change would be a good place to start. Currently different states use different measures for screening and assessing substance problems: For example: Arizona uses ALFA, Colorado uses CCAR, Oklahoma uses CCAR, District of Columbia uses CAGE, Indiana uses HAPI, and Utah uses SASSI and ASI.

Different instruments assess substance problems from different points of view: For example the CCAR and ALFA evaluate substance problems from the clinician's point of view, while the SASSI,

² NASMHPD-NASADAD (1998). National Dialogue on Co-Occurring Mental Health and Substance Abuse Disorders. Washington D.C.

NASMHPD-NASADAD (1999). Financing and Marketing the New Conceptual Framework for Co-Occurring Mental Health and Substance Abuse Disorders: a Blueprint for Systems Change. Final Report. Washington, D.C.

CAGE , MAST are self administered questionnaires from the consumers point of view and the ASI is a structured interview from the consumers point of view.

Instruments such as the CAGE, could be used to flag substance abuse issues, however the limited range of the instrument (4 yes no questions) makes it useless in calculating change using the RCI.

In order for change measures to be calculated, states would need to collect and electronically store assessment data. Only four states report screening for substance problems and electronically storing substance data.

The choice of restricting the populations, for example to SMI and SED, or restricting the age range, has potential implications for change measures using the RCI. Case mix differences may affect the variance on the substance measure and as such affect the amount of change needed to observe a significant RCI.

Ideally what is needed is a simple common assessment instrument with good scale properties, reliability and validity that is not a burden to the clinical and assessment system.

Additional Findings:

Two studies were conducted in Colorado to assess the degree to which different procedures would identify co-occurring mental health and substance problems.

The first study evaluated the CCAR as an assessment of substance problems contrasted to an indicator developed from matching persons receiving services in the mental health treatment system with the alcohol/drug treatment system. For the period July 1997 thru June 2000, mental health and substance abuse records were matched to assess the degree of overlap between the mental health and substance abuse service systems. The CCAR System contains an evaluation of substance abuse problems by mental health clinicians assessing the consumer. From this assessment a binary variable is constructed as a yes/no indicator of substance abuse problems. Evaluating this variable against a variable indicating whether the consumer was found in only the MHS data set or in both ADAD and MHS indicates convergence, however there is still substantial uniqueness between the assessment indicators.

	From CCAR Assessment		Total
	No Sub Abuse Indicated	Sub Abuse Indicated	
From Records Match			
No Match: MHS only	79%	21%	94%
Match: ADAD & MHS	24%	76%	06%
Total	76%	24%	

The second study evaluated the CCAR as an assessment of substance problems contrasted to the presence of a DSM-IV substance abuse diagnosis co-occurring with a mental health diagnosis. Beginning July 1, 2000, the CCAR System was expanded to include multiple diagnoses with one diagnosis reserved for substance problems. It was therefore possible to evaluate the CCAR substance abuse indicator mentioned above against the presence of a substance diagnosis. Preliminary analysis indicates convergence, however there is still substantial uniqueness between the assessment indicators. In particular if the CCAR indicates no substance problems the diagnosis agrees 92% of the time. However if the CCAR indicates a

substance problem the diagnosis concurs only 50% of the time. Thus using the substance diagnosis may substantially under report the existence of co-occurring substance problems.

	From CCAR Assessment		Total
	No Sub Abuse Indicated	Sub Abuse Indicated	
From Diag Assessment			
No Sub Abuse Indicated	92%	50%	81%
Sub Abuse indicated	08%	50%	19%
Total	74%	26%	

Regardless of the procedures chosen one would expect the possibility of differences between states based on differences in administrative procedures and the differences in the control and precision of the assessment procedures.

Recommendations:

- When they exist co-occurring substance and mental health problems are major determiners in outcome. Therefore it is critical to invest in screening, and assessment to identify the sub-population of persons with both mental health and substance problems. Additionally treatment systems responsive to the needs of this population and that are effective in reducing substance problems and thus reduce the exacerbating effect of substance problems on mental health are needed to address this important area.
- The three indicators recommended here address the issue.
- However we need to progressively increase the precision of the assessment system in order to reduce the uniqueness that complicates our analyses.
- The RCI has promise as a statistical procedure that produces an indicator of change. However it can not "fix" instruments with weak psychometric properties.
- We may want to consider a modification of the indicator of change to include not only those individuals who change positively but also those individuals who change negatively.

WORKGROUP CHAIR: Jack Wackwitz (Colorado)

INDICATOR: O11 LIVING SITUATION OF MENTAL HEALTH CONSUMERS

RATIONALE FOR USE: Independent living is an important goal for persons with serious mental illness. Though housing status is affected by a variety of factors, systems that address and support independent community living are expected to show a higher proportion of individuals living in independent settings. The proportion of persons living in each Living Situation is a measure of system performance.

APPROACH TO MEASURE: As a "point in time" measure, this indicator provides a description of the consumer population's Living Situation. Understanding the number and percent of consumers living independently, in foster homes, institutions, etc., is informative for planning purposes, indicators of need for services, and describes the number of persons using higher cost living situations.

To use this indicator as an 'Outcome' measure, data must be examined for the same consumer across two or more data points (e.g., at admission and annually; admission and discharge). This change data can be used to measure the number of consumers moving from a less restrictive Living Situation to a more restrictive setting, or vice versa. Collecting data on the same consumer across time is more challenging and creates the potential for missing data points.

MEASURE(S): Living situation is calculated for several different consumer living situations. The number of persons living in a particular arrangement is the numerator and the denominator is the total number of persons who received public mental health services.

Numerator: The number of consumers residing in each of the following living situation categories:

- **Private Residence Combined:**
Optional detail if available:
 - Private Residence without support**
 - Private Residence receiving support**
- **Foster Home**
- **24-Hour Residential Care**
- **Institutional Setting**
- **Jail/ Correctional Facility**
- **Homeless/ Shelter**
- **Other**
- **Unknown**

Denominator: The total number of consumers reporting a living situation. Consumers whose living situations were "unknown" are excluded from the denominator.

CURRENT IMPLEMENTATION STATUS: Ten of the 16 states were able to provide living situation data: Arizona, Colorado, Illinois, Missouri, New York, Oklahoma, South Carolina, Texas, Utah, and Vermont. Six reported the data for FY2000 and four reported it for FY2001.

STUDY RESULTS: Table 1 shows that the majority of people served by state mental health system live in private residences. A median of 86.3% of people live in private residences, while 6.3% live in 24 hour residential setting, 3.1% in institutional settings, and 2.6% are homeless or live in shelters.

Table 1: Living Situation of Consumers Served by State Mental Health Systems:

State	Private Residence Combined		24 Hour Residential		Institutional Setting		Jail/ Correctional Facility		Homeless/ Shelter		Other		Unknown *		Total Served
	n	%	n	%	n/a	%	n/a	%	n	%	n	%	n	%	
AZ (FY'01)	71,422	85.4%	2,625	3.1%	247	0.3%	865	1.0%	5,212	6.2%	3,214	3.8%	3,480	4.2%	83,585
CO (FY'00)	64,328	85.2%	5,199	6.9%	2,440	3.2%	1,934	2.6%	1,611	2.1%	0	0.0%	0	n/a	75,512
IL (FY'01)	52,358	73.0%	5,172	7.2%	2,835	4.0%	194	0.3%	3,051	4.3%	1,451	2.0%	6,662	9.3%	65,061
MO (FY'01)	2,606	50.4%	1,929	37.3%	388	7.5%	27	0.5%	221	4.3%	0	0.0%	9	0.2%	5,171
NY (SY'00)	117,586	76.9%	8,783	5.7%	13,322	8.7%	6,524	4.3%	4,612	3.0%	2,167	1.4%	26,058	17.0%	152,994
OK (FY'01)	21,641	88.1%	891	3.6%	771	3.1%	n/a	n/a	1,251	5.1%	0	0.0%	0	0.0%	24,554
SC (FY'00)	48,688	87.2%	2,394	4.3%	640	1.1%	519	0.9%	672	1.2%	2,936	5.3%	1,453	2.6%	55,849
TX (FY'00)	37,044	91.0%	2,316	5.7%	n/a	n/a	619	1.5%	730	1.8%	0	0.0%	0	0.0%	40,709
UT (FY'00)	13,562	88.6%	1,170	7.6%	92	0.6%	148	1.0%	338	2.2%	0	0.0%	0	0.0%	15,310
VT (FY'00)	14,396	88.6%	1,514	9.3%	91	0.6%	39	0.2%	214	1.3%	0	0.0%	0	0.0%	16,254
Median	42,866	86.3%	2,355	6.3%	640	3.1%	519	1.0%	991	2.6%	0	0.0%	9	1.4%	48,279

Consumers' whose living situation was "unknown" are not included in the count of "Total Served" and are excluded from the calculations of percent in the various living situations.

Table 2 shows how Median living situations vary by consumer characteristics. Children under age 18 are the consumer age group that has the highest percent living in private residences (91%) followed by adults aged 18 to 64 at (86%), with older adults having the lowest median percent (66%).

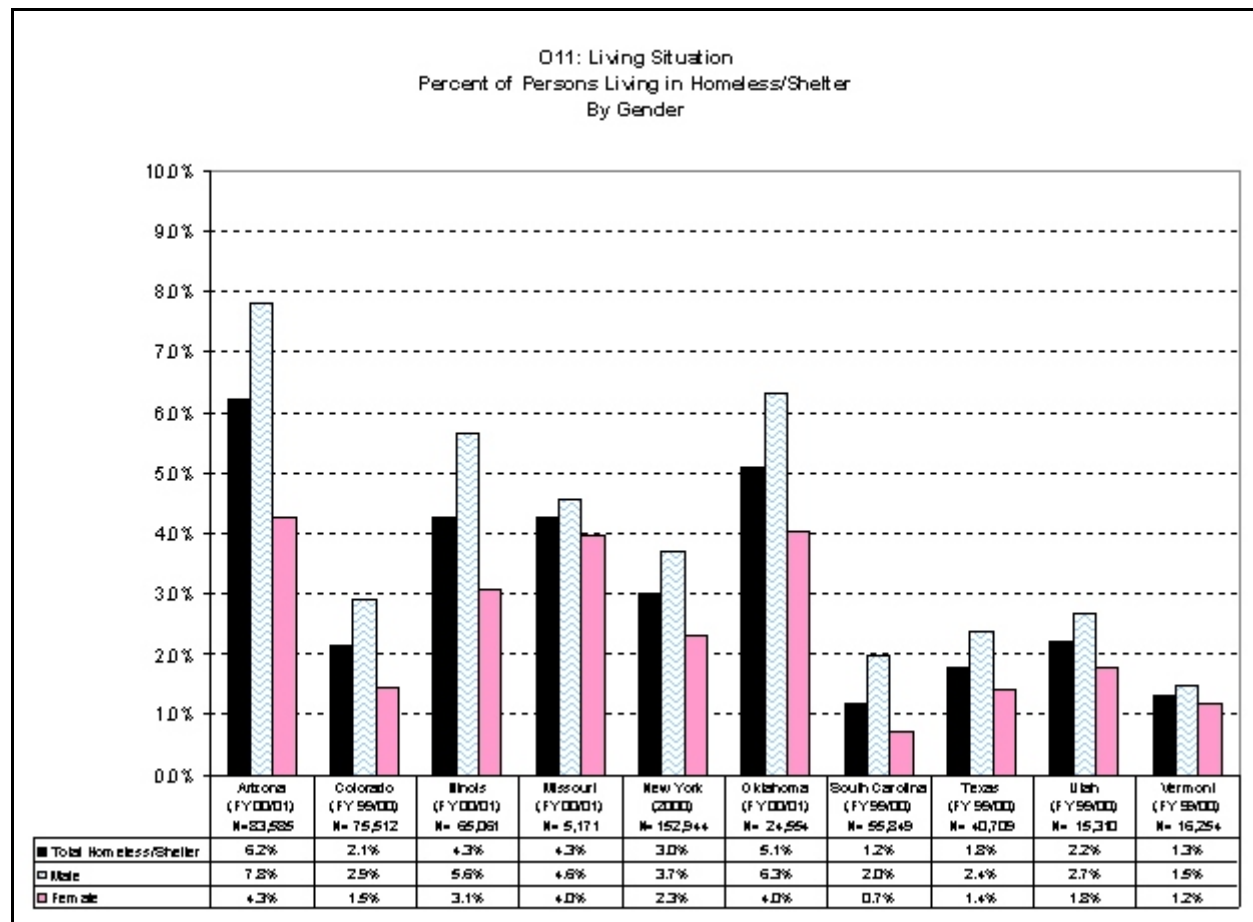
Adults with major mental illnesses (MMI) were slightly less likely to live in private residences (81%) than adults with other mental health diagnoses (84%).

Missouri only reported Living Situation data for clients in their state Medicaid Rehabilitation Services Option that serves the most seriously mentally ill. Including other clients served (over 50,000) in the community would result in a different living situation distribution.

Table 2: Living in Private Residences

		Number of States	Median	Low Score	High Score
Total		10	86.3%	50.4%	91.0%
Age Group					
	Youth	6	91.5%	87.0%	95.8%
	Adult (18 and up)	9	86.1%	54.8%	91.4%
	Older Adult (65+)	9	66.2%	9.8%	85.0%
Gender					
	Female	10	88.8%	53.8%	93.3%
	Male	10	83.3%	47.2%	87.7%
Race/Ethnicity					
	Black	10	84.4%	59.3%	140.5%
	White	10	86.7%	36.6%	91.2%
	Native American				
	Asian/Pacific Islander	10	87.3%	42.9%	95.2%
	Hispanic	9	88.8%	50.0%	93.1%
	Other	10	83.0%	61.8%	94.3%
Diagnosis					
	Adults w/MMI	7	80.7%	7.2%	91.5%
	Other Adults	6	84.4%	47.5%	90.1%
	Children w/MMI	3	92.6%	87.2%	95.8%
	Other Children	3	90.2%	87.0%	95.8%

Homeless/Living in Shelters: The median percent of mental health consumers who were homeless or living in a shelter was 2.6%, with a high of 6.2% and a low of 1.2%. As the chart below shows, males were more likely than females to have a homeless living situation. Consumers with diagnoses of psychoses, substance abuse disorders, depressive disorders, and schizophrenia had the highest rates of being homeless or living in shelters.



SOURCE/S OF INFORMATION: Consumer self report, MIS

POPULATIONS:

- | | |
|---|-------------------------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|----------------------------|
| ■ Psychiatric Inpatient Settings | ■ Community-based Settings |
|----------------------------------|----------------------------|

ISSUES:

- Unknowns were not included in the final consumer count. Percent for each category was calculated using only those consumers with reported data.
- When grouping by Age, "Youth" includes 0-17 year-olds, "Adults" include 18-64 year-olds, and "Older Adults" include persons age 65 or more.

- For grouping by Ethnicity, "Asian" includes Native Hawaiian, and all Pacific Islander groups. "Other" includes Native American, persons with unknown ethnicity, and all other ethnic groups not specified within "Caucasian", "Hispanic", "African American", or "Asian" categories.

The current data is point in time data from the states. States will strive to collect this information on consumers on an ongoing basis (semi-annually, annually, and/or at discharge).

At the time of reporting, four states, Missouri, Oklahoma, South Carolina, and Texas were able to report the optional data categories for Private Residence: without support and receiving support. However, several states are beginning to collect this additional detail and will be able to report it for the FY2001/02.

It is difficult to collect this information after admission because consumers leave services without a formal discharge and the information is not available. Those consumers receiving more than 6 - 12 months of service are more likely to have at least two data points on this measure.

Lessons Learned/Recommendations: Living situations for mental health consumers may change frequently. If a system does not collect the living situation every time the consumer moves, the data is incomplete. However, most states do not collect this level of detail. The work group recommends collecting this information at a minimum of at admission, annually, and at discharge. Special studies may need to be conducted for consumers who move frequently to determine the salient data needed to track change over time and frequency of moves.

Proposed Frequency of Reporting Living Situation:

- 1 At time of Admission
- 2 Periodically: Annually; Semi-Annually
- 3 At time of Discharge

Definitions for Living Situation Categories:

Private Residence Combined: Individual lives in a house, apartment, trailer, hotel, dorm, barrack, and/or Single Room Occupancy (SRO). This is the sum total of all consumers living in a Private Residence. It is the sum of the following two (2) categories for those states who can collect the additional detail of "Without Support" and "Receiving Support".

Private Residence Without Support: Individual lives in a house, apartment, trailer, hotel, dorm, barrack, Single Room Occupancy (SRO) and does not require routine or planned support to maintain his/her independence in the living situation.

Private Residence Receiving Support: Individual lives in a house, apartment, trailer, hotel, dorm, barrack, Single Room Occupancy (SRO) and receives planned support to maintain independence in his/her private residence. This may include individualized services to promote recovery, manage crises, perform activities of daily living, and/or manage symptoms. Support services are delivered in the person's home environment. The person providing the support services may include a family member or a friend living with the consumer or a person/organization periodically visiting the home.

Foster Home: Individual resides in a Foster Home. A Foster Home is a home that is licensed by a County or State Department to provide foster care to children, adolescents, and/or adults. This includes Therapeutic Foster Care Facilities. Therapeutic Foster Care is a service that provides treatment for troubled children within private homes of trained families (Uniform Data Definitions).

24-Hour Residential Care: Individual resides in a residential care facility with care provided on a 24 hour, 7 day a week basis. This level of care may include a Group Home, Therapeutic Group Home, Board and Care, Crisis Residential, Residential Treatment, or Rehabilitation Center, or Residential Care/Treatment Facility.

Institutional Setting: Individual resides in an institutional care facility with care provided on a 24 hour, 7 day a week basis. This level of care may include a Skilled Nursing/Intermediate Care Facility, Nursing Homes, Institutes of Mental Disease (IMD), Inpatient Psychiatric Hospital, Psychiatric Health Facility (PHF), Veterans Affairs Hospital, or State Hospital.

Jail/ Correctional Facility: Individual resides in a Jail and/or Correctional facility with care provided on a 24 hour, 7 day a week basis. This level of care may include a Jail, Correctional Facility, Prison, Youth Authority Facility, Juvenile Hall, Boot Camp, or Boys Ranch.

Homeless: A person has no permanent place of residence where a rental, lease or mortgage agreement between the individual and the owner exists.

A person is considered homeless if he/she lacks a fixed, regular, and adequate nighttime residence and/or his/her primary nighttime residency is:

- 1) A supervised publicly or privately operated shelter designed to provide temporary living accommodations,
- 2) An institution that provides a temporary residence for individuals intended to be institutionalized, or
- 3) A public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings (e.g., on the street).

Other: All other living situations.

Unknown: Information on an individual's residence is not available.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

WORKGROUP CHAIR: Nancy Callahan

INDICATOR: 012 LEVELS OF CRIMINAL JUSTICE INVOLVEMENT FOR CONSUMERS OF MENTAL HEALTH PROGRAMS

RATIONALE FOR USE: The interface of the mental health and criminal justice systems is an area of concern for mental health program administrators who must deal with multiple consumer sub-populations with diverse needs. Knowing the size of specific sub-populations is important for planning targeted activities and allocating resources. A measure that assesses changes in the proportion of the caseload that has involvement with the criminal justice system is an indicator of treatment outcomes as well as a tool for planning interventions.

APPROACH TO MEASURE: The criminal justice system includes both institutional and community components. Institutional corrections includes arrests, jail time and prison time. Community corrections includes probation and parole. The suggested measures focus on involvement with institutional corrections. A separate measure rate is calculated for the three levels of involvement (arrest, jail, prison) except in states with combined jail and prison systems.

Administrative databases were used to determine the overlap between the consumers of community mental health programs and the components of the criminal justice system. Interagency agreements were necessary prior to the exchange of data and the calculation of measures. During the testing phase, two states had access to arrest databases and two states had access to jail/prison databases. When unique identifiers do not exist across state agencies, and this was the case with most states, a method for matching records from administrative data bases needed to be developed. Three methods were used during the study: linking by a constructed identifier, probabilistic method to weight matches of identifier variables, and probabilistic population estimation. The first two methods produce results that indicate which consumers were included in both databases, while the third method estimates how many consumers were included in both databases.

The preferred method developed by the workgroup used administrative databases; the use of consumer self-report and clinician assessment were not excluded as alternatives. Administrative databases are designed to capture events for all consumers served in programs, while consumer self-report and clinician assessment are subject to non-response bias. Additionally, consumer self-report and clinician assessment tend to focus on current history and activity and its relationship to the current episode of treatment. Evaluation of the results obtained from these different methods need to continue.

A series of measures is suggested to enable the data to be used as an outcome measure. The first measures are the proportion of consumers with arrests, jail time, or prison time during the treatment (index) year. These concurrent measures are conceptualized as status measures that provide some indication of the level of specialized need in the mental health service community. The second measures are the proportion of consumers treated in the index year who also had arrests, jail time, or prison time in the following year. These subsequent measures are conceptualized as change measures for programs (or outcomes). These measures do not assume that the same consumers had criminal justice system involvement in the two periods; however, with administrative data matching, this is possible to determine. These measures describe the complexity (severity) of the caseload.

All adult consumers seen by community providers during a year are included in the measure. The treatment year is a fiscal year of service, regardless of how long the consumer has received

treatment during that year. The measure is not restricted to consumers at 6-month or 12-month post admission, which has the potential to exclude a substantial proportion of consumers seen during the course of a year (e.g.. they did not have a review or were not eligible for the specific review). Separate rates can be computed by different sub-populations of consumers, including adults with serious mental illness.

While a similar set of measures may be developed for youth, there are additional issues around the definition of juvenile justice involvement, such as the use of state custody. Measures for youth were not tested during this phase of the project.

MEASURE(S):

Measure 1A: Percentage of consumers with arrests during the treatment year.

Numerator: Number of consumers with at least one arrest during the fiscal year.

Denominator: Total number of consumers receiving service during the fiscal year.

Measure 1B: Percentage of consumers with at least one arrest during the year following the treatment year.

Numerator: Number of consumers with at least one arrest during the year following the treatment year.

Denominator: Total number of consumers receiving service during the treatment year.

Measure 2A: Percentage of consumers with at least one night in jail during the treatment year.

Numerator: Number of consumers who spent at least one night in jail during the treatment year.

Denominator: Total number of consumers receiving service during the treatment year.

Measure 2B: Percentage of consumers with at least one night in jail during the year following the treatment year.

Numerator: Number of consumers who spent at least one night in jail during the year following the treatment year.

Denominator: Total number of consumers receiving service during the treatment year.

Measure 3A: Percentage of consumers with at least one night in prison during the treatment year.

Numerator: Number of consumers who spent at least one night in prison during the treatment year.

Denominator: Total number of consumers receiving service during the treatment year.

Measure 3B: Percentage of consumers with at least one night in prison during the year following the treatment year.

Numerator: Number of consumers who spent at least one night in prison during the year following the treatment year.

Denominator: Total number of consumers receiving service during the treatment year.

CURRENT IMPLEMENTATION STATUS: Four states provided information on the proportion of consumers with arrests during the treatment year. One state (AZ) was able to compute rates based on consumer self-report and linking administrative data. The self-report data represented about half of the consumers served, and the rates between the two measures were different. Only information from the matching method is included in this report. Two other states (CT, VT) were also able to compute rates based on linking with administrative database of adults arrested. One state (RI) was able to provide arrest rates based on a survey (65% response rate) for consumers at a 6-month review. The measure for RI includes only adults with SMI; the measure for CT includes all adults, and the measures for AZ and VT include separate rates for adults with SMI and other adults.

Three states provided information on the proportion of consumers with jail/prison time during the treatment year. Two states (OK, VT) use administrative databases; one state reported for a prison system and the other state reported for a combined jail/prison system. Another state (RI) used clinician report done as part of annual treatment reviews (80% completion rate) for a combined jail/prison system.

In addition, states have continued to use clinical assessments to collect information on criminal justice contacts. For example, the local mental health authorities in Texas collect number of arrests in past three months and nights in prison/jail in past three months from consumers at intake, 90-day review, and annual review. Using information from all assessments, Texas reports that 3.4% of adult consumers were arrested. Change measures can be computed when such data is consistently collected for all consumers.

STUDY RESULTS: The following table provides the overall results of analysis of FY2000 adult consumers of community mental health programs. Four states reported arrest rates: two states only for adults with SMI (RI and VT). Three states reported incarceration rates: one state only for adults with SMI (RI). Complete detail for sub-populations are provided in the appendix table.

	Arrests AZ	Arrests CT	Arrests RI	Arrests VT	Prison OK	Jail/Prison RI	Jail/Prison VT
Total	13.7%	8.0%	6.1%	11.0%	3.7%	3.1%	7.0%

Specific caveats about the data reported in the above table:

- Rates for AZ, CT, OK, and VT are based on linking administrative databases of the same year. Arrest rates for RI are based on consumer self-report of activity in prior 12 month on an annual survey. Incarceration rates for RI are based on staff report of activity in prior 12 months on an annual treatment plan review.

- AZ rates include mental health and substance abuse consumers who were served in the behavioral health system during the reporting period. RI results include only consumers in SMI programs at 6-month reviews.
- OK includes only consumers admitted to mental health treatment programs during the fiscal year. RI results are based on calendar year caseloads. AZ and VT results are based on fiscal year caseloads.
- No order of events should be assumed.

The analysis of the results across states needs to consider several factors. First, the consumer populations may not be comparable. Data for OK includes only consumers admitted during the fiscal year, whereas data for the other states includes all consumers served in the fiscal year. If a state only provided data for adults with serious mental illness, then comparisons should be restricted to that level. States that provide data for both adults with serious mental illness and other adults allow a comparison of the difference in rates across these two sub-populations of consumers served in community programs. For example, in AZ and VT the rates for adults with serious mental illness were lower than the rates for other adults.

Second, the differences in the overall rates may be partly due to the diverse methods. In AZ, self-report and linking administrative data produced different rates. Some of this difference may be the result of a response bias (overall response rate about 50%). However, in RI no difference was found in the basic demographics and diagnoses of respondents compared to non-respondents with a response rate of 65% to the annual survey.

Third, the databases available for the components of the criminal justice system varied by state. AZ obtained access to an administrative data to measure rates of arrest. VT had access to administrative databases to measure rates of arrest and rates of use of the combined jail and prison system. OK had access to administrative data to measure rates of prison used.

Finally, the completeness of the data should be considered. When administrative databases are linked, the potential for incomplete information is compounded. The matching methods used 2-4 data fields from each database. Future studies should consider tracking the amount of missing data to quantify the size of the issue.

Given these cautions, similarity in the patterns within states provide additional information about rates for sub-populations.

- Rates of involvement for males were generally higher than the rates for females
- Rates of involvement for younger adults were higher than older adults
- Adults with serious mental illness were less likely to be involved in the criminal justice system than other adults of community treatment programs

SOURCE/S OF INFORMATION: MIS, Clinician review during annual treatment plan process, Consumer self-report in annual survey

POPULATIONS:

- | | | |
|--|--|---|
| <input type="checkbox"/> Children with a Serious Emotional Disturbance | <input type="checkbox"/> All Children | |
| <input checked="" type="checkbox"/> Adults w/ a Serious Mental Illness | <input checked="" type="checkbox"/> All Adults | <input checked="" type="checkbox"/> Geriatric |

SETTINGS:

- | | |
|---|--|
| <input type="checkbox"/> Psychiatric Inpatient Settings | <input checked="" type="checkbox"/> Community-based Settings |
|---|--|

ISSUES: There are differences across states in the practices of the criminal justice systems which need to be highlighted when interpreting the indicator values. In some states, the jails and prisons operate as a single system (Connecticut, Delaware, Hawaii, Rhode Island, and Vermont), while in most states these are separate entities. Comparisons of rates should take into account this intrinsic difference in correctional structures across states.

The treatment year will include new consumers, consumers discharged, and continuing consumers. The measure as originally stated in the NASMHPD Framework was designed for new admissions to community treatment, and consumers with community tenure up to 1 year. Those measures have a potential to lose a substantial share of the caseload of community programs (both acute stay and long term). Most programs serving consumers with serious mental illness report stable caseloads: both low admission and discharge rates. Programs serving adults with other mental disorders report greater fluctuation in the caseloads. In order to capture the rate of involvement of consumers with the criminal justice system, assessments should include all consumers active in treatment, regardless of the length of stay.

The time-frame for the measure should be related to how the indicator is going to be used. As a program evaluation and planning tool, states suggest fiscal year measures. During initial stages of developing the capacity for the measures, states may choose to use 6-month intervals. For use as a clinical intervention, more timely information may be of interest and appropriately obtained through clinician interaction with consumers.

A series of measures also provides information that can be interpreted as measures of access and measures of outcomes. The rate of involvement of the active caseload could be considered a measure of access to treatment for a special population. The rate of involvement in the year following treatment could be considered a measure of outcome - the degree to which the program can influence the level of involvement of consumers after care has been provided.

Given access to administrative data from the institutional components of the criminal justice system, states can determine rates of arrest, jail, and prison for the general population and subgroups (age, gender, race). A comparison of rates for mental health programs and the general population will provide state mental health agencies with information useful for planning. The measures produce an odds ratio that indicates the elevated (or lowered) risk of criminal justice system involvement for people in mental health treatment compared to people in the general population.

CAUTION: Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

SUB-GROUP CHAIR: Lucille Schacht (NRI)

INDICATOR: S1 CONSUMER INVOLVEMENT IN POLICY DEVELOPMENT, QUALITY ASSURANCE AND PLANNING.

RATIONALE FOR USE: A core value of public mental health system is respect for the values, beliefs, and input from consumers and family members into the design and delivery of services. In order for public mental health systems to better respond to the needs of mental health consumers and their families, there must be opportunity for meaningful input from these groups in to the development of policy, planning and quality assurance efforts of mental health agencies. Meaningful participation by consumers and family members requires significant representation on policy-making boards and planning committees.

APPROACH TO MEASURE: Consumer and Family involvement is a difficult item to measure through a simple performance indicator. A workgroup of state mental health agency planners in the 16-State Study took the lead in working on this indicator. This workgroup, chaired by Connecticut, held several conference calls to discuss the indicator and ultimately conducted a survey of the 16 states regarding a number of aspects of consumer and family involvement. The full workgroup report is included in the on-line appendix for this report at www.nasmhpd.org/nri and www.mhsip.org.

MEASURE(S): The Workgroup has not yet recommended any specific operational performance measures for this indicator. Two areas of focus are: the inclusion of consumers on planning boards, and the inclusion of family members on planning boards. However, the workgroup is still analyzing a number of potential measures for this indicator and does not yet have specific measures to recommend.

CURRENT IMPLEMENTATION STATUS: The Workgroup on Consumer and Family Involvement surveyed all 16-State Study states on a variety of types of consumer and family participation, in both formal advisory boards, quality assurance teams, and planning groups, as well as the inclusion of consumer participation in vision statements and other SMHA initiatives.

For example, the workgroup asked states: "Question 2: Is there statewide stakeholder involvement/primary consumer/family member involvement in development and/or input into state mental health authority regarding mental health issues?"

Question 2 results:

	Primary consumer Involvement		Family Member Involvement		Parents/ Caregivers of Minor Children Involvement	
	Yes	No	Yes	No	Yes	No
1) Development, involvement in legislation	81% (13)	19% (3)	81% (13)	19% (3)	81% (13)	19% (3)
2) writing/calling	88% (14)	13% (2)	88% (14)	13% (2)	88% (14)	13% (2)
3) advocating changes in legislation *	100% (16)	6% (1)	100% (16)	6% (1)	100% (16)	6% (1)
4) state policies development: respond to draft policies before adopted by the agency	88% (14)	13% (2)	88% (14)	13% (2)	88% (14)	13% (2)
5) promulgating rules and regulations	81% (13)	19% (3)	75% (12)	25% (4)	75% (12)	25% (4)
6) serve on contract reviews	56% (9)	44% (7)	50% (8)	50% (8)	63% (10)	38% (6)

* Due to separate Councils (adult and children) in one state, numbers do not add to 100%.

States listed the following under "Other": mental health plans, procedures for new programs, review program changes and revised procedures, quality monitoring, re-designation of designated agencies in public health (one state each).

Regarding the inclusion of consumers and family members on State Mental Health Planning Councils, the workgroup found: there was a wide range of responses with regard to designated slots for various constituencies. In summary, no states had slots for persons of color, 5 states had community at large slots, 8 states had family of adults with SMI, 9 states had slots for parents of children with SED, 10 states had slots for non-consumer advocates and mental health providers, 11 states had consumer slots and 12 states had state employee slots.

State Slots for Consumers and other Advocates:

SLOTS for	Yes	No	Did Not Report
Slots for Consumers	11 states (11 Councils) 68.75%	4 states (5 Councils) 25.0%	2 states (2 Councils) 12.50%
Family of Adults with SMI	8 states (8 Councils) 50.00%	6 states (7 Councils) 37.75%	3 states (3 Councils) 18.75%
Parents with Children with SED	9 states (9 Councils) 56.25%	5 states (6 Councils) 31.25%	3 states (3 Councils) 18.75%
Non-Consumer Advocates	10 states (10 Councils) 62.25%	5 states (6 Councils) 31.25%	3 states (3 Councils) 18.75%
Mental Health Provider	10 states (11 Councils) 62.25%	4 states (4 Councils) 25.00%	4 states (4 Councils) 25.00%
Community at Large	5 states (6 Councils) 31.25%	6 states (6 Councils) 37.50%	6 states (6 Councils) 37.50%
Persons of Color	0 states (0 Councils) 0.00%	7 states (8 Councils) 43.75%	10 states (10 Councils) 62.25%
State Employees	13 states (14 Councils) 81.25%	2 states (2 Councils) 12.25%	2 states (2 Councils) 12.50%

Other included: state and regional Mental Health Board members, attorneys, post- doctoral students, and representatives from state Bar and University. If more than 16 states are reported, it is due to one state have two councils (one child and one adult).

Representation: Although some states did not have designated slots for any constituent groups, they did have representatives on the Mental Health Planning Council. Note that those states with designated slots had generally a higher percentage of representation for that group. For consumers, the percentage ranged from a low of 14% to a high of 52% in states with slots versus a low of 4% to 23% among states without them. For family members of adults with SMI, the percentage ranged from a low of 4 % to a high of 25% for states with slots versus a low of 0% to a high of 21% in states without them. For parents of children with SED, the range is from a low of 8% to a high of 38% for states with slots versus a low of 10% and a high of 23% for states without them. For non-consumer advocates, the range is from 2% to 44% for states with slots versus 0% to 16% for states without them. For mental health providers, the range is from 9% to 34% in slotted states versus 12 to 19% for non-slotted states. For community at-large, the range is from 7% to 16% for slotted states versus 0% to 13% for non-slotted states. Six states did not respond to the question and may change the

findings. For persons of color, the range was from 3% to 48% for non-slotted states. Ten (10) states did not respond to this question and this could change the findings significantly. For state employees, the range is from 9% to 67% for slotted states versus 20% to 34% for non-slotted states.

POPULATIONS:

- Children with a Serious Emotional Disturbance
- Adults w/ a Serious Mental Illness
- All Children
- All Adults
- Geriatric

SETTINGS:

- Psychiatric Inpatient Settings
- Community-based Settings

SOURCE/S OF INFORMATION: Administrative records

ISSUES: The workgroup will continue to work on defining performance indicators and operational measures that can be used to report data for this indicator. The full workgroup report is available on the www.nasmhpd.org/nri and www.mhsip.org websites.

WORKGROUP CHAIR: Donna Stimpson (Connecticut)

INDICATOR: S2 AVERAGE RESOURCES EXPENDED ON MENTAL HEALTH SERVICES, BY TYPE OF SERVICE AND CONSUMERS

RATIONALE FOR USE: Fiscal resources available for mental health services are a core component of a mental health information system: who receives what from whom at what cost with what outcome. Managers of mental health systems typically consider dollars as a key issue in managing a system of care. However, financial data typically has often not been recorded and reported in a manner that facilitates comparisons across organizations.

Cost information can be analyzed on its own, to demonstrate relative levels of effort and resource availability. Costs data can also be combined with several of the other indicators to provide a better understanding of access, utilization, and cost of services. When gauged against system values and goals and tracked over time, this information supports informed decision-making at all levels: Federal, state, and local agencies, programs, and treatment teams. By examining the components of consumers, service utilization, and cost together, managers can begin to understand trends in system-level changes across time. For example, combining information on access (e.g., penetration rates and number of consumers), service utilization (e.g., number of units per consumer), and cost (i.e., cost per unit of service) provides managers with a better understanding of service performance and helps them to manage risk.

The average dollars per consumer provides administrators information on the global average dollars allocated on a per capita (consumer) basis. Examination of this information across counties, regions, and/or states helps to interpret trends in resource allocations. It also provides information on Medicaid billing practices and a provider's ability to generate revenue. This information viewed across several fiscal years provides information on trends in increasing (or decreasing) resources and the cost of providing services.

MEASURE(S): The total amounts of direct service expenditures on mental health services in one year divided by (1) the total number of enrolled (or general population) and (2) the total number of persons who received at least one mental health service. Expenditures are depicted by (1) type of service and by (2) the numbers of units of service and (3) cost per unit of service provided. The total dollars across services includes Medicaid and non-Medicaid dollars. It may also include Block Grant dollars, federal match, disproportionate share monies, and other dollars used to supplement mental health services.

Numerator: Total amount of annual direct services expenditures for Inpatient, Outpatient and Total Mental Health

Denominator 1: Total number of unduplicated consumers served during the fiscal year in Inpatient, Outpatient, and total services.

Important: Unduplicated consumer counts should include all mental health consumers who received one or more publicly funded mental health service, across all ages (>0 through elderly) and all service categories for FY1998/99. This includes all consumers receiving variants of publicly funded psychiatric inpatient services, and all "community" or outpatient consumers. For example, include consumers receiving mental health services from community inpatient psychiatric hospitals, state hospitals, crisis, residential facilities, ACT, outpatient, etc.

These consumers have a primary mental health diagnosis or are receiving treatment from a mental health service provider. Dual diagnosis consumers **with** a primary mental health diagnosis are included. Forensic consumers receiving mental health services in the community are included. Jail diversion consumers receiving mental health services are also included.

Do Not Include:

- Substance Abuse Only Consumers
- Developmentally Delayed Only Consumers
- Forensic Consumers in the State Hospital

Denominator 2: Total number of days of Inpatient Services provided and units/hours of Outpatient Services provided to the unduplicated consumers served reported under denominator 1 above.

The total Outpatient Service units includes Medicaid and non-Medicaid units (hours/contacts) for community mental health services. Outpatient Services includes Medicaid and non-Medicaid community based services including assessments, evaluations, medications, individual therapy, family and group therapy, case management, Assertive Community Treatment (ACT), rehabilitation and vocational services.

POPULATIONS COVERED BY INDICATOR: The total dollars includes all monies available in the mental health system for the Fiscal Year including state dollars, Federal match, and disproportionate share used to supplement mental health services. It does not include Substance Abuse Only dollars, Developmental Disability only dollars, dollars for Forensic consumers in the State Hospital, other fiscal sources for Inpatient Services (private insurance), or other fiscal sources for Outpatient

CURRENT IMPLEMENTATION STATUS: Nine of the 16 states were able to provide total dollars across all services and inpatient services: Arizona, Colorado, Missouri, Oklahoma, South Carolina, Texas, Utah, Vermont, and Virginia. Three reported data for FY'99 (1998-1999), and six reported FY'2000 data. Seven of the 16 states were able to provide total dollars across Outpatient Services: Arizona, Colorado, Missouri, Oklahoma, Utah, South Carolina, and Vermont. Three reported data for FY'99, and four reported FY'00 data.

Nine of the 16 states were able to provide unduplicated consumers in the entire state system and for Inpatient Services. Seven of the 16 states were able to provide unduplicated consumers for Outpatient Services: Arizona, Colorado, Missouri, Oklahoma, South Carolina, Utah, and Vermont. Three reported data for FY'99, and four reported FY'00 data.

STUDY RESULTS: Costs data Table 1 shows the total, inpatient, and outpatient expenditures and unduplicated counts of consumers served of State Mental Health Authorities for mental health services from seven states in FY2000 (unless otherwise noted). It is important to note that these results are preliminary because each state may have used different methodologies for calculating these figures. The state's numbers include different programs and cost calculations. Many of the states were not able to unduplicate all consumers across all service categories and therefore may have an inflated count of consumers.

Costs data from the 16-State Study shows a wide spread in total mental health expenditures, from a low of \$73 million in Vermont to a high of \$674 million in Virginia. However, due to

vastly different population and consumer caseloads, comparing raw expenditures data is not very useful. The comparison of Average dollars per consumer, shows a much reduced range of expenditures, with states expending between \$2,425 per consumer to \$4,006 per consumer.

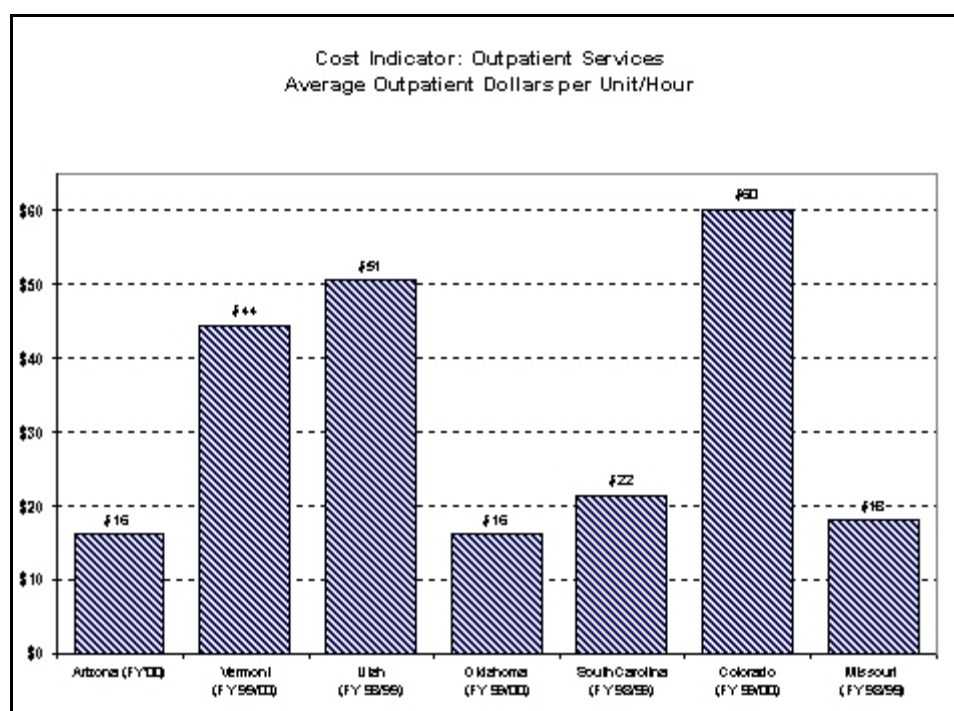
Average inpatient expenditures per consumer shows a much larger spread of values, with states spending between \$8,992 to \$33,166 per average inpatient. Inpatient data also shows that states have major differences in their use of psychiatric inpatient beds, as demonstrated by the variation in the average number of inpatient days per consumer from a low of 24.0 to a high of 91.7.

Costs Table 1: State Expenditures for Mental Health Services:

COST INDICATOR									
State	Arizona (FY 00)	Vermont (FY 88,00)	Utah (FY 82,88)	Oklahoma (FY 88,00)	South Carolina (FY 82,88)	Colorado (FY 88,00)	Missouri (FY 82,88)	Texas (FY 00)	Virginia (FY 88,00)
Dollars									
Total Dollars	\$ 913,141,974	\$ 73,217,480	\$ 123,141,808	\$ 256,286,453	\$ 247,613,256	\$ 234,178,918	\$ 338,188,179	\$ 674,310,424	\$ 329,789,643
Inpatient Dollars	\$ 21,972,282	\$ 9,087,400	\$ 51,252,803	\$ 88,447,748	\$ 89,811,224	\$ 56,306,803	\$ 112,184,280	\$ 240,540,316	\$ 218,767,432
Outpatient Dollars	\$ 892,069,692	\$ 64,130,080	\$ 72,888,995	\$ 167,838,705	\$ 157,802,032	\$ 177,872,115	\$ 226,003,899	\$ 433,770,108	\$ 111,022,211
Dollars per Client									
Average Dollars per Client	\$ 3,888	\$ 3,259	\$ 3,132	\$ 2,707	\$ 2,425	\$ 3,340	\$ 3,167	\$ 4,006	\$ 2,757
Average Inpatient Dollars per Client	\$ 3,992	\$ 3,196	\$ 21,144	\$ 11,749	\$ 12,415	\$ 10,281	\$ 8,480	\$ 16,896	\$ 31,715
Average Outpatient Dollars per Client	\$ 3,078	\$ 2,845	\$ 1,027	\$ 654	\$ 1,204	\$ 1,259	\$ 1,346	\$ 2,670	\$ 1,117
Clients									
Total Clients	37,005	18,871	42,807	94,286	92,046	70,118	107,104	168,329	119,627
Total Inpatient Clients	2,929	274	2,424	7,613	7,234	5,477	13,229	14,303	6,888
Total Outpatient Clients	34,076	18,597	40,383	86,673	84,812	64,641	93,875	154,026	112,739
Units									
Total Inpatient Days	72,000	18,794	113,602	272,524	275,708	148,404	317,408	390,151	632,405
Total Outpatient Units/Hours	18,195,281	585,050	347,487	6,851,022	7,335,454	2,136,134	7,845,636	NA	NA
Average Units									
Average Inpatient Days per Client	20.3	62.6	45.9	36.2	38.1	27.3	24.0	80.6	91.7
Total Outpatient Units per Client	190.1	59.5	20.3	40.3	53.9	31.6	74.5	NA	NA
Dollars per Unit									
Average Inpatient Dollars per Day	\$ 297	\$ 484	\$ 451	\$ 328	\$ 326	\$ 377	\$ 353	\$ 280	\$ 346
Average Outpatient Dollars per Unit	\$ 18	\$ 44	\$ 51	\$ 16	\$ 22	\$ 40	\$ 18	NA	NA

Average outpatient expenditures per consumer also show a wide variation in mental health expenditures, with states spending between \$654 per consumer to \$3,076 per consumer. At least part of this variation in spending, may be due to the intensity of outpatient services that consumers receive. Consumers received between 20.3 units or hours and 190.1 units or hours of outpatient services. Due to the large variation in spending for outpatient services, and the large variation in hours of average outpatient services received, average outpatient dollars per unit of outpatient services varies from a low of \$16 to a high of \$60.

Note: some states reported outpatient units of service and other states



reported hours of outpatient service. The total units for Outpatient Services counts hours/contacts delivered by community based programs to consumers receiving publicly funded mental health services. It does not include units delivered to consumers with a primary diagnosis of Substance Abuse or Developmental Disability. It does include units delivered to consumers in jail who are receiving Outpatient Services.

Some systems track outpatient units as an hour of time. Other systems count a contact as a unit. The contact may be a phone call, a three hour case management visit, or a 15 minute medication check. Others may count any 15 minute period of time as a unit, so a one hour therapy session would be counted as 4 units.

Total mental health expenditures exceeds the inpatient and outpatient expenditures, due to state spending on Day Treatment, Residential, and Crisis Services. However, these categories were not reported by all states and their amounts are not shown in these tables. Caution must be exercised when comparing state data since Some state may not have access to Medicaid information and/or non-Medicaid data.

POPULATIONS:

- | | | |
|---|----------------|-------------|
| ■ Children with a Serious Emotional Disturbance | ■ All Children | |
| ■ Adults w/ a Serious Mental Illness | ■ All Adults | ■ Geriatric |

SETTINGS:

- | | |
|----------------------------------|----------------------------|
| ■ Psychiatric Inpatient Settings | ■ Community-based Settings |
|----------------------------------|----------------------------|

SOURCE/S OF INFORMATION: Administrative records

ISSUES IN DEVELOPING COMPARABLE STANDARDIZED MEASURES:

- Some state may not have access to Medicaid fiscal information.
- Medicaid dollars are paid claim dollars. It may not include cost-settled dollars.
- Different providers within a state may have different rates: these dollars are aggregated across a state.
- Costs may be estimated for services when no cost data was available.
- Some states report both state hospital and community psychiatric inpatient costs; others report only one of these.
- Non-Medicaid dollars may be obtained from cost reports and other aggregated figures.
- These methodologies may vary across states.

Inpatient Services (Units are Days)

State Hospital
Children's Long Term Residential; Children's Treatment Facility
Community Psychiatric Inpatient Settings
Institutes of Mental Disease (IMD)
Psychiatric Health Facility

Outpatient Services (Units are Contacts/Minutes or Hours)

Outpatient Services (including Medications, Individual, Group, Family)
Case Management Services
ACT
Rehabilitation Services; Vocational Services

Crisis Services (Units are Contacts/Minutes or Hours)

NOTE: Some states may not be able to separate Crisis from Outpatient Services. In this instance, include Crisis in the Outpatient Data.

Crisis Services (Including Crisis Contacts, Crisis Stabilization, Mobile Crisis)

Day Treatment / Residential Services (Units are Full or Partial Days)

NOTE: Some states may be able to separate Day Treatment from Residential Services. In this instance, Please report the data separately so we can examine the differences in these two types of services.

Full or Partial Day Treatment Services
Partial Hospitalization
Vocational / Rehabilitation Day Services
Psycho-Social Rehabilitation Day Services
Crisis Residential Services
Crisis Respite Beds
Other Residential Services

Using the data "Rules" described above, please list the Total Units of Service for Each Service Category. NOTE: It is not logical to provide Total Units of Service across ALL SERVICES because "Day Units" and "Contact Units" can not be combined.

Total Units of Inpatient Services (Units are Days) and By Age

State Hospital
Children's Long Term Residential; Children's Treatment Facility
Community Psychiatric Inpatient Settings
Institutes of Mental Disease (IMD)
Psychiatric Health Facility

Crisis Services (Units are Contacts/Minutes or Hours)

NOTE: Some states may not be able to separate Crisis from Outpatient Services. In this instance, include Crisis in the Outpatient Data.

Crisis Services (Including Crisis Contacts, Crisis Stabilization, Mobile Crisis)

Total Units of Outpatient Services (Units are Contacts/Minutes or Hours) and By Age

Outpatient Services (including Medications, Individual, Group, Family)
Case Management Services
ACT
Rehabilitation Services; Vocational Services

Total Units of Day Treatment / Residential Services (Units are Full or Partial Days)

NOTE: Some states may be able to separate Day Treatment from Residential Services. In this instance, Please report the data separately so we can examine the differences in these two types of services.

Full or Partial Day Treatment Services
Partial Hospitalization
Vocational / Rehabilitation Day Services

Psycho-Social Rehabilitation Day Services
Crisis Residential Services
Crisis Respite Beds
Other Residential Services

Recommendations: There is a wide variability across states in documenting dollars. Different states include different services. There are various methodologies for estimating costs and rates, and states have multiple sources of funding. These all influence the total dollars for a state system.

CAUTION:

Caution should be exercised in drawing any conclusions about the performance of any individual state based upon comparisons between and among states which may vary greatly in their organization, structure, financing, service priorities, and clientele. [See page 15 for elaboration].

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Section III: Appendix

I. Final Report Authors and Acknowledgments

II. Indicator Workgroup Detailed Results Tables

III. Consumer Surveys

APPENDIX I: AUTHORS AND ACKNOWLEDGMENTS

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APPENDIX II: INDICATOR WORKGROUP DETAILED RESULTS TABLES

APPENDIX III: CONSUMER SURVEYS

1. Adult MHSIP Consumer Survey (MHSIP)
(available from www.mhsip.org)

2. Youth Services Survey (YSS)
(available from www.mhsip.org)